

AGENDA ITEM #18

APPROVED BY CCG/27/06



Woolf Crossing

Planned Area Development

Case ZON05-20 ❖ CMX Project No. 7074.01 ❖ Project Manager: Ron Hilgart, P.E.

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Planned Area Development
City of Glendale Case Number ZON05-20
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Introduction



Section 1.0 - Introduction

Woolf Crossing is a proposed 738-acre planned community located within the western portion of City of Glendale (the City). Situated adjacent to the future Loop 303 Freeway and the proposed Northern Parkway, the community is approximately four and a half miles east of the White Tank Mountains. Refer to **Figure 1** for a Regional Vicinity Map, which depicts the location of the project in relation to the White Tank Mountains and surrounding area. **Figure 2** provides an aerial view of the project and existing conditions.

Woolf Crossing is located approximately two miles west of the entrance to Luke Air Force Base (AFB), which is at Litchfield Road, just south of Northern Avenue. The Woolf Crossing Project Team recognizes the importance of Luke AFB for the nation's defense and its economic impact, and is committed to being compatible with Luke AFB's operations. The majority of the Property is outside of the 1988, 65-Ldn Joint Land Use Study (JLUS) noise contours for the F-16 and all of the Property is outside the Luke AFB's clear zones and accident potential zones. Through careful placement and transition of land uses, Woolf Crossing fully complies with Luke AFB's Graduated Density Concept (GDC), which is Luke AFB's stated criteria for compatibility and discussed in detail within Section 4.3.

Although the area surrounding Woolf Crossing is currently agricultural or rural residential, recently several large subdivisions and higher density master planned communities in the vicinity have been approved. These developments are or will be under construction in the very near future. The majority of these developments lie to the north and west of Woolf Crossing. These include Sycamore Farms, Rancho Gabriela, and Greer Ranch within the City of Surprise. The majority of Prāsada (formerly known as Cactus Lane Ranch) is located within the City of Surprise; however, the portion adjacent to Woolf Crossing is located within the City of Glendale's planning area. Nearby developments within the County's jurisdiction includes Cortessa, White Tank Foothills, Zanjero Pass, and Zanjero Trails. Refer to **Figure 3**, Surrounding Zoning which depicts the location of these developments in relation to the project.

The purpose of this application is to request a zone change from Agricultural (A-1) to Planned Area Development (PAD). With PAD zoning, Woolf Crossing will provide a fully integrated community using a variety of densities and a broad range of lot sizes, housing types, and land uses. This master plan approach to development will have a positive impact on the surrounding area by creating integrated communities along with retail goods and services, employment opportunities, educational and recreational facilities, and regional infrastructure improvements.

Woolf Crossing will be developed with careful attention paid to stormwater drainage and establishment of open space. The planning and design process will preserve significant open space for project amenities for use in parks, a pedestrian trail system, open space and as retention / drainage corridors. These open space areas will be used to help enhance the project's streetscape and help provide compatible transitions between uses. Specifically, the land plan for Woolf Crossing provides a mixture of residential and nonresidential uses, in addition to several amenities such as a neighborhood park and an elementary school site to meet the needs of the residents.

The Woolf Crossing PAD document is intended to provide a comprehensive master plan, which is consistent with City regulations and appropriately incorporates the City's



Section 1.0 - Introduction

Residential Design and Development Manual in order to provide for a quality development. The Woolf Crossing PAD also provides a detailed description of residential and nonresidential land uses, trail and open space concepts, architectural design themes, development standards, and infrastructure requirements for the community.

Element homes will be the Master Developer for the single-family portion of the proposed 738-acre Mixed-Use Master Plan community and has partnered with Parks/Martin Development Co., Inc., a commercial real estate developer with extensive experience in the development of mixed-use regional projects that are similar to what is envisioned for the commercial portion of this Mixed-Use Master Plan community.

The proposed "Woolf Crossing" master plan community includes a variety of single family home ownership opportunities on various lot sizes and the opportunity for a major commercial development which will accommodate a broad range of regional, neighborhood and community needs. The project integrates open space and recreational amenities, all of which will provide an exceptional quality of life for the future residents.



Compliance with Glendale 2025 General Plan



Section 2.0 - Compliance with General Plan

Currently, the Property is used for agricultural purposes, and is zoned Agricultural (A-1) in the City of Glendale. The Glendale 2025 General Plan designates the portion of the Property within the 65 Ldn noise contour as Luke Compatible Land Use Area. The City has recently approved a Major General Plan Amendment that affects Woolf Crossing and nearby areas outside of the 65 Ldn noise contour. The General Plan Amendment shows the Woolf Crossing area as Entertainment Mixed Use west of Sarival Avenue, Low Density Residential (1.0 to 2.5 du/ac) between Sarival Avenue and the 65 Ldn noise contour and Luke Compatible Land Use Area east of the 65 Ldn noise contour. It also identifies the realignment of Sarival Road between Olive Avenue and Northern Avenue. The purpose of the realignment is to accommodate a full diamond interchange of the Northern Parkway at Sarival Avenue. The Woolf Crossing land uses comply with the approved general plan amendment by proposing commercial uses west of the Sarival alignment, residential uses less than 2.0 du/ac between Sarival Avenue and the 65 Ldn noise contour, and Luke compatible land use area within the 65 Ldn noise contour.



Goals and Objectives



Section 3.0 - Goals and Objectives

The Woolf Crossing PAD will allow the development of a master planned community consistent with Element Homes' philosophy and commitment to create high-quality neighborhoods. The Property will have a strong identity and vision that creates compatibility between the residential and nonresidential uses. In particular, the open space and the circulation system depicted in the PAD are the primary organizing and unifying elements of the project.

The goal of the Woolf Crossing PAD is to ensure a strong "sense of place" for residents and promote a high-quality mixed use community appropriate to this area. One of the key elements of the Woolf Crossing PAD is its "Gateway" location. Because of this unique situation of the Loop 303 and the proposed Northern Parkway, the Woolf Crossing land use plan has been designed to provide flexibility for nonresidential uses to allow adjustment to the changing needs of the market and residents. The City's zoning ordinance specifically encourages this goal through the Planned Area Development process. Specifically, the purpose of PAD zoning is as follows:

This district accommodates mixed use development which combines residential and nonresidential uses through common design elements. The district promotes flexibility and encourages variations in building design, lot arrangement, circulation patterns, and land uses. Further, it is the intent of the PAD to:

- A. Encourage creative and effective use of land and circulation systems to accommodate changes in land development technologies.*
- B. Encourage residential development to provide a mixture of housing types and designs.*
- C. Encourage innovative development or redevelopment concepts for all land use types to provide greater variety and intensity of uses.*
- D. Provide a process which relates the urban design and scale of project to the unique characteristics of the site.*
- E. Require the nature and intensity of development to be supported by adequate utilities, transportation, drainage, and common open spaces to serve the development and to minimize impact on existing or future adjacent development.*
- F. Encourage development that is consistent with the policies and the guidelines established in any specific plan and the General Plan.*

Glendale Municipal Code, Appendix A, Zoning §5.901



Site Location



Situated adjacent to the future Loop 303 Freeway and bisected by the proposed Northern Parkway, Woolf Crossing is approximately four and a half miles east of the White Tank Mountains and two miles west of the entrance to Luke AFB, which is at Litchfield Road, just south of Northern Avenue.

4.1 Surrounding Properties

To understand the existing zoning in the Woolf Crossing property and surrounding area, please refer to **Figure 3**. Surrounding property ownership is identified in **Figures 4-A and 4-B**.

At the present time, the existing land uses surrounding Woolf Crossing are as follows:

- On-site: Vacant, agricultural.
- North: Vacant, agricultural within Maricopa County jurisdiction, Cactus Lane Ranch Packaging and Warehousing Buildings.
- South: Residential within Maricopa County jurisdiction, Sarival Farms Phase 2, Agricultural.
- East: Falcon Dunes Golf Course and agricultural land within Maricopa County jurisdiction.
- West: Vacant and agricultural land within Maricopa County jurisdiction.

As mentioned previously, the area surrounding Woolf Crossing is currently agricultural or rural residential. Recently several large subdivisions and higher density master planned communities in the vicinity have been approved, and these developments are or will be under construction in the very near future. The majority of these developments lie to the north and the west of Woolf Crossing. These include Sycamore Farms, Prasada, Rancho Gabriela, Greer Ranch, Cortessa, White Tank Foothills, Zanjero Pass and Zanjero Trails. Refer to **Figure 3**, Surrounding Zoning Exhibit, which illustrates the locations of these developments in relation to Woolf Crossing.

Approximately one mile to the north of Woolf Crossing is the proposed Sycamore Farms Development. On July 22, 2004, the Surprise City Council approved the Planned Area Development (PAD) for Sycamore Farms. This PAD allows a variety of land uses including mixed use, high density residential, institutional, and commercial. The overall gross density allowed for Sycamore Farms is approximately 4.0 dwelling units per acre. Excluding non-residential acreage from the density calculation, the overall density allowed is 9.7 dwelling units per acre.

Located adjacent to the north side of Woolf Crossing is a portion of the property, which comprises Prasada (formerly known as Cactus Lane Ranch). Prasada, a large tract of land owned by Suburban Land Reserve, is being planned and entitled by Fulton Homes. The majority of Prasada, approximately 3,300 acres, is located in the City of Surprise's planning area and is zoned by the County as Rural Residential (R-43). A request for a zone change to Planned Area Development (PAD) was submitted to the City of Surprise in December 2005. The portion of Prasada adjacent to Woolf Crossing is within the City of Glendale's planning area and has not been submitted for entitlements through the County, or the City of Glendale. This area is currently zoned Rural Residential (R-43) by the County.



Rancho Gabriela is a 799 acre PAD approved through the City of Surprise, bounded by Cactus Road and Sweetwater Avenue to the north, Peoria Avenue to the south, Bullard Avenue to the east, Reems Road to the west and located approximately one mile north of the eastern edge of Woolf Crossing. Rancho Gabriela is primarily a residential community, with a small amount of neighborhood commercial and an industrial parcel. The overall gross density of Rancho Gabriela is 2.9 du/ac. However, if the commercial and industrial are excluded from the acreage, the overall density is 3.9 du/ac.

The Greer Ranch PAD was approved by the City of Surprise on June 13, 2002. Located approximately one mile north of Woolf Crossing, Greer Ranch is a 586 acre master planned community that includes single-family residential, neighborhood commercial, parks and an elementary school site. Greer Ranch South contains an overall gross density of 2.3 du/ac, with a density only considering residential acreage of 2.8 du/ac. Currently not platted, the northern portion of Greer Ranch was approved at an overall density of 3.0 du/ac, with a density only considering residential acreage of 3.3 du/ac.

Cortessa is a 613 acre master planned community with approved Residential Plan of Development (RUPD) zoning. Cortessa, located at the northwest corner of Olive Avenue and Citrus Road, is a mixed-use development consisting of Rural-43, R1-8, R1-6, and C-2. The residential portion of this community contains approximately 1,732 dwelling units and a gross density of 2.82 du/ac. Another nearby master planned community is the approved White Tank Foothills with RUPD zoning. Directly south of Cortessa, this community is a 640 acre mixed-use development with approximately 1,286 dwelling units at a gross density of 2.0 du/ac. A preliminary plat has been approved by the County for White Tank Foothills, with a final plat that is pending.

4.2 Access

The existing roadway network and circulation features are detailed in **Figure 5**, Existing Rights-of-Way. Within the Woolf Crossing area are two north-south and two east-west arterial roads. Currently, Olive Avenue, Northern Avenue, Sarival Avenue and Reems Road are two-lane paved roads. There are no pedestrian or transit facilities located along these streets. Ultimately, these arterial roads, which provide access to and from Woolf Crossing, will have the following numbers of lanes: Olive and Sarival Avenues – 6 lanes, Northern Avenue - 4 lanes and Reems Road – 4 lanes south of the Northern Parkway and 6 lanes north of the Northern Parkway.

The future Loop 303 Freeway alignment is located on the west boundary of the development. In accordance with the recent general plan amendment, the frontage of the future Loop 303 Freeway will contain entertainment/mixed-use developments. Due to the large separation between the residential area of this project and the future Loop 303 Freeway, we believe the freeway will have minimal negative impacts on the residential portions of the development. However, the Freeway will provide an important transportation corridor for the development when brought to its ultimate configuration.

The proposed Northern Parkway alignment passes through the middle of Woolf Crossing along the current Butler Drive alignment. This location is the City's preferred alignment which will provide a connection to Loop 101, downtown Glendale and beyond. The proposed Northern Parkway will also serve as an important regional transportation



Section 4.0 - Site Location

corridor for the future development. According to the Design Concept Report prepared by URS for Northern Parkway, the preliminary estimate of right-of-way width that will be needed varies between 160 feet to 235 feet, corresponding to approximately 41.9 acres.

The traffic volume projected to travel both the Loop 303 and Northern Parkway will provide tremendous visibility for the Commercial Parcel. The preliminary design of the Loop 303 and Northern Parkway restricted the access to the Commercial Parcel to two (2) half-diamond traffic interchanges on the Loop 303, at Olive Avenue and at Northern Avenue, and a half-diamond traffic interchange on Northern Parkway at Sarival Avenue. This restricted access would have limited the development potential of the Commercial Parcel. Therefore, Sarival Avenue is proposed to be realigned to satisfy the minimum distance requirements between Sarival Avenue and the Loop 303 as required to permit the expansion of the traffic interchange on Northern Parkway at Sarival Avenue to a full-diamond interchange. This full-diamond traffic interchange will enhance the development potential of the Commercial Parcel. The approved extension of the half-cent transportation sales tax will assist in the financing of the Maricopa Association of Governments regional transportation plan that will include the construction of the Loop 303 freeway and Northern Parkway adjacent to and through the Commercial Parcel.

4.3 Luke Air Force Base

Woolf Crossing is located approximately two miles west of the entrance to Luke AFB. The Woolf Crossing Project Team recognizes the importance of Luke AFB for the nation's defense and its economical impact, and is committed to being compatible with Luke's operations. The majority of the Property is outside of the 65-Ldn noise contours (from the 1988 JLUS lines) and all of the Property is outside the Base's clear zones and accident potential zones. Refer to **Figure 6** for the Property's location in relation to Luke AFB noise contours, clear zones and accident potential zones. Recognizing that each municipality has unique circumstances and obstacles in attempting to control development up to and surrounding the 65-Ldn noise contour, Luke AFB recently developed a concept of graduated development away from the 65 Ldn noise contour. From the Graduated Density Concept (GDC) guidelines adopted by Luke, the maximum densities are based on the distance from the 65 Ldn, and are as follows:

Table 1 : Graduated Density Concept Guidelines

Distance from 65 Ldn Line	Max Density Allowed
0 - 1/2 mile	2 du/ac
1/2 - 1 mile	4 du/ac
1 - 3 miles	6 du/ac

Due to its proximity to the Base, the entire Property lies within Luke AFB's GDC. Through careful placement and transition of land uses, Woolf Crossing fully complies with Luke's GDC, which is Luke's stated criteria for compatibility. **Appendix A** contains a letter from Mr. James R. Mitchell, dated March 7, 2006, documenting that Luke AFB officials have reviewed the Woolf Crossing Master Plan and stating that it falls within the GDC Guidelines. **Figure 7** shows the locations of the two Graduated Density Concept



Section 4.0 - Site Location

areas that fall within Woolf Crossing along with a table displaying the proposed and allowed densities in each area.

In conformance with Luke AFB guidelines and the City's General Plan, the Woolf Crossing PAD designates the land within the 65-Ldn noise contour as Luke Compatible Land Use Area (LCLU). This area is intended for mixed-use employment that will serve to establish an employment area to support the expanding residential communities in the vicinity, while removing the potential for residential land uses beneath Luke AFB's noise contours. The mixed use employment area will assist in balancing the jobs to population ratio in the area by creating the potential for appropriate employment uses such as office and manufacturing. Residents within Woolf Crossing will be able to enjoy employment opportunities directly adjacent to them, which will also reduce home to work commuting distances, thereby reducing the impact to the area's transportation network.

The planning process for Woolf Crossing has accounted for the Property's unique location and the proposed master plan appropriately places and creates logical transitions of land uses. For example, larger lots and lower densities are proposed closer to the 65-Ldn noise contour line, transitioning to the Northern Parkway and mixed use area. The PAD also provides a buffer for the existing residential area south of Northern Avenue by locating the largest lots in the community on the north side of Northern. While the project is not within the zone of influence of significant Phoenix metropolitan *civilian* airports, Woolf Crossing lies within the "Territory in the Vicinity of a Military Airport" as defined by State Statute A.R.S. § 28-8481. As such, the Public Report for any subdivision within Woolf Crossing will include a statement that complies with the Statute.



Existing Conditions



5.1 Existing Land Use and Zoning

Currently, the Property is used for agricultural purposes, and is zoned Agricultural (A-1) in the City of Glendale. The proposed rezoning request is consistent with the Planning Commission initiated General Plan Amendment (GPA 05-06).

5.2 Existing Topography and Drainage

Regional hydrologic data for this portion of the County has been evaluated by the Flood Control District of Maricopa County (FCDMC). URS Engineering prepared a draft Area Drainage Master Plan (ADMP) in June 2001 (URS, 2001) for the FCDMC, which detailed the existing hydrology conditions west of the Agua Fria River. The U.S. Army Corps of Engineers (USACE) HEC-1 hydrologic models for this draft drainage area master plan have been recently updated by URS (and approved for public release by FCDMC in January 2004). The study limits are bound by McMicken Dam and US 60 to the north, the west by the White Tank Mountains, and the south by the Salt/Gila Rivers. This report was an update to an Area Drainage Master Plan that was prepared for the FCDMC by the WLB Group, Inc. (WLB, 1995). Model data developed by URS to predict 100-year 24-hour flow rates for the region were used in the evaluation of offsite flows for the Woolf Crossing project area.

The watershed upstream of the Woolf Crossing project area extends north to Cactus Road and northwest through a portion of the White Tank Mountains. The east-west arterial roadways convey storm runoff to the Agua Fria River. The specific roadways in relation to Woolf Crossing project area are Olive Avenue to the north and Northern Avenue to the south. A portion of the flow controlled by Olive Avenue is diverted to Cotton Lane, which conveys flow south to Northern Avenue.

The Woolf Crossing project area is generally comprised of farmland with minimal improvements. The area immediately north of Olive Avenue and west of Cotton Lane is largely undisturbed and conveys overland flow to a roadside channel or swale on the west side of Cotton Lane. Flows that originate from the west and northwest are considerably reduced due to the construction of Citrus Road and other regional improvements. This roadway is an incised dirt road, which directs a portion of the runoff flows south to Northern Avenue. The area west of Citrus Road, between Northern and Olive Avenue, known as White Tank Foothills, is currently farmland, however the area has recently submitted a final plat and will likely control storm flows to the west side of Citrus Road.

5.3 Archaeological Survey

An archaeological study was performed by SWCA Environmental consultants in July 2005. The report found no sites, either eligible or ineligible, on the site. Based upon the results of the study, no further archeological work was recommended.

5.4 Geological Subsidence

The Woolf Crossing project site is located within an area referred to as the West Salt River Valley Groundwater Basin. The Basin is bounded on the north by the Hieroglyphic Mountains and Hedgepeth Hills, the east by the Union Hills, Phoenix Mountains and Papago Buttes, the south by South Mountain and the Estrella Mountains, and on the



Section 5.0 - Existing Conditions

west by the White Tank Mountains. Resulting from large-scale groundwater pumping for agricultural purposes, land within this Basin has experienced land subsidence and earth fissuring for more than 50 years. In order to analyze the effects this may have on the Woolf Crossing project, a Land Subsidence and Earth Fissure Investigation was prepared by Geological Consultants, Inc.

For approximately the last 20 years groundwater levels have either stabilized or increased as much as 125 feet in the Property's vicinity. This is likely in response to flood recharge, increased use of Central Arizona Project (CAP) water in lieu of groundwater, and changes of land use from agricultural to urban. Historic elevation data suggest that residual land subsidence is continuing in the area. The land subsidence documented in the Woolf Crossing area is consistent with findings in other areas such as the Salt River Valley (Phoenix), the Queen Creek Apache Junction area, the Eloy-Casa Grande-Stanfield area, Tucson, and the Avra Valley area and is not considered unusual. If the regional water table in the area remains static or starts to rise, as has been the trend in local well data, the subsidence rate will decrease and land subsidence in the area will eventually stabilize and cease altogether. However, the annual rate of subsidence appears to be diminishing with time as the basin and aquifer system reaches an equilibrium condition. If groundwater levels continue to rise or remain static, land subsidence rates could diminish to negligible levels over the next twenty to forty years.

The investigation found that there is a possible earth fissure located just east of the intersection of the Loop 303 and Olive Avenue, within the northwest portion of the PAD area. The investigation recommends additional exploration be conducted into this possible earth fissure so that its characteristics can be defined prior to development. Once the characteristics of this possible earth fissure are defined, then if necessary, mitigation measures can be developed that are compatible with site specific plans. Since the possible fissure is not located in the first phase of the development, but rather in the northwest corner of the commercial area, which is designated for a later phase, additional investigation can be conducted in the future for that section of the PAD without affecting the Woolf Crossing residential areas. According to the report prepared by Geological Consultants, other than the earth fissure investigation described above, no additional subsidence-related investigations are required for the Woolf Crossing property.



The Proposed Project



6.1 Community Character

As a master planned community, Woolf Crossing provides a variety of residential housing styles and densities, neighborhood commercial, recreational and educational facilities and infrastructure to support the resident population. The character of Woolf Crossing will be achieved by utilizing a cohesive, high quality design that will have a positive impact not only for the project itself, but on the City and the surrounding area. To create an integrated mixed-use master planned community, there are certain defining elements that will be utilized to ensure the overall design compatibility to the area, which include:

- Land uses: locate land uses to create transitions from less intensive to more intensive uses in a logical and complementary manner that is compatible with Luke AFB's Graduated Density Concept.
- Building design and architectural themes: shape, colors, material selections, craftsmanship, and decorative details.
- Landscape buffer: provide sufficient landscape buffers to transition land uses.
- Neighborhood design: maximize opportunities for exposure to community open spaces and amenities.
- Commercial Area: focus of commercial at the intersection of Loop 303 and Northern Parkway.
- Open space amenities: location, variety, and design concepts.
- Path and trail system: thoughtfully planned to encourage pedestrian and non-motorized vehicular use while fully integrating the overall community.
- Landscaped area: location, species, design, and placement.
- Community signage and entry monumentation: location, design concepts, colors, and materials.
- Streetscape: including perimeter walls, view fences, street signs and landscaping.



Residential Edge Treatment Along Northern Parkway



Section 6.0 - The Proposed Project

Through these design elements, the character of Woolf Crossing will be integrated with the unique characteristics of the area, while providing a high quality of architectural design, and amenities for residents to enjoy. The Woolf Crossing Community will be a distinct and desirable asset to the City of Glendale.

6.2 Land Uses

Due to the project's location relative to the future Loop 303, the Northern Parkway, and Luke Air Force Base, the Project Team proposes a mixed-use community, which includes a variety of uses to meet the needs of the residents of Woolf Crossing, provides a commercial activity area and an opportunity for employment uses and job creation. To achieve the proposed master planned development, the included land uses are: Residential, Commercial, Schools, Park, and Luke Compatible Land Use Area (LCLU). Refer to **Table 2**, which identifies the proposed land use, the gross acreage and residential densities of each parcel. **Figure 9** illustrates the proposed land use configuration.

Table 2: Land Use Summary

Land Use Category	Parcel	Gross Ac.	Proposed Units	Proposed Gross Density (du/ac)
Commercial	A	186.1	-	-
	B	39.4	-	-
	Subtotal	225.5	0	0.0
Residential	C	64.6	179	2.8
	D	22.1	56	2.5
	E	50.6	130	2.6
	H	62.1	135	2.2
	I	50.1	89	1.8
	J	25.2	67	2.7
	Subtotal	274.7	656	2.4
Luke Compatible Land Use Area	K	87.1	-	-
	L	32.6	-	-
	M	92.4	-	-
	Subtotal	212.1	0	0.0
Neighborhood Park	F	5.2	-	-
Elementary School	G	20.8	-	-
Total		738.3	656	0.9

The Woolf Crossing Master Plan includes a broad range of residential lot sizes. The Woolf Crossing PAD also offers commercial and other uses that are compatible to Luke AFB operations. Additionally, an elementary school site and a neighborhood park site are provided for the educational and recreational needs of the future homeowners and their children. Each of these land uses are discussed in more detail within this section.



A. Residential Land Use Category

An extensive amount of thought and effort was placed into the design of the residential component of Woolf Crossing. The Developer proactively met with City of Glendale Planning Department staff to discuss the Woolf Crossing residential layout as part of a Maricopa County rezoning application. As a result of their discussions, the entire residential layout was redesigned and re-engineered to incorporate Glendale's vision for quality, sustainable neighborhoods prior to an application being submitted to the City of Glendale. The emphasis of the design is on the creation of unique neighborhoods, linked with open space areas and trails that are integrated into the fabric of the residential area.

The Woolf Crossing land use plan also addresses the Property's unique location and impact of major transportation corridors by creating logical transitions of land uses and appropriate landscape buffers. Larger lots and lower densities are placed closer to the 65-Ldn noise contour line, transitioning to the Northern Parkway and mixed use areas. **Figure 12**, the Conceptual Trails and Open Space Master Plan identifies this transition. The PAD also provides an increased buffer for the existing residential area south of Northern Avenue by locating the largest lots in the community on the north side of Northern.

The residential portion of Woolf Crossing was designed to incorporate many of the elements of the City's Residential Design and Development Manual (RDDM), such as:

- Varying lot widths within the same development parcel.
- A mixture of lot sizes and housing types to create an integrated neighborhood that provides home ownership opportunities to a broad market.
- Extensive use of cul-de-sacs, knuckles and curvilinear streets to avoid repetitive streetscapes.
- Creating varied lot depths for lots backing onto an arterial or collector street.
- Staggering front yard setbacks by 3 feet or more on adjoining lots.
- Varying the depths of the perimeter lots, which are visually significant and provide for variation in perimeter wall alignments.
- A minimum twenty foot (average forty foot) wide landscape tract is provided on the east side of Sarival Avenue, a thirty foot wide landscape tract is provided along Olive Avenue and a forty foot landscape tract along Northern Avenue.
- Numerous lots that are adjacent to or back up to open space areas.
- Providing significantly more than the minimum 2,000 square feet in difference between the minimum area of two or more lot sizes within the master planned community.
- Restriction of direct access to arterial and collector streets from lots backing onto these streets by wide landscape tracts and non-vehicular access easements.

Appendix B provides a detailed list of the RDDM Guidelines and the manner in which Woolf Crossing complies with those guidelines.



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(1) Permitted Uses (Parcels C, D, E, F, H, I, and J)

Residential development within the Woolf Crossing PAD shall be developed in accordance with the following permitted use list:

a. Permitted Uses.

- (1) One (1) detached single residence dwelling per lot.
- (2) Public schools, parks, and playgrounds.

b. Uses Subject to Conditions.

- (1) Public utility facilities required for local service, provided that there are no offices, maintenance facilities, outdoor storage, or full-time employees related to the site.
- (2) Subdivision model home complexes, subject to administrative review as described in Sections 7.501 and 7.504.
- (3) Temporary office or construction trailers, subject to administrative review as described in Sections 7.501 and 7.505.
- (4) Wireless communication facilities, subject to Sections 7.506 and 7.600:
 - a. Building mounted antennas may locate on buildings used for non-residential uses including churches, schools, public buildings, and other institutional uses.
 - b. Alternative structure mounted antennas which utilize existing light pole or electric utility pole. The related equipment shelter must be located on property developed for non-residential use or in public right-of-way subject to approval of City Engineer.

c. Uses Subject to Conditional Use Permit.

- (1) Churches, on property located at the intersection of two (2) collector streets or fronting or siding on an arterial street.
- (2) Home child care center.
- (3) Private schools, excluding dormitories, on property located at the intersection of two (2) collector streets or fronting or siding on an arterial street.
- (4) Home Occupations (Class II): See Section 7.304.
- (5) Subdivision model home complexes with off-site sales: See Section 7.504.

d. Accessory Uses.

Uses which are customary and incidental to the principal use of the property. All accessory uses are subject to Section 7.300.

- (1) Fences and walls. See Section 7.201.
 - a. Front yard: maximum height-three (3) feet.
 - b. Side or rear yard: maximum height-six (6) feet, except eight (8) feet when abutting an arterial street.
- (2) Garage or enclosed storage.
- (3) Swimming pool.
- (4) Satellite earth station.
- (5) Amateur radio tower.
- (6) Home Occupations (Class I): See Section 7.304.



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- (7) Yard sales, subject to Section 7.320.
- (8) Household pets.

B. Commercial Land Use Category

The Woolf Crossing Master Plan provides approximately 225.5 gross acres or 31 percent of the PAD gross acreage for commercial uses. Based on an assumed Floor Area Ratio (FAR) of 0.2, the commercial area has the capacity to generate nearly 1.96 million square feet of useable space. Full build out of this commercial area could ultimately yield approximately 3,614 jobs (225.5 acres x 43,560-sq. ft x .20 lot coverage divided by 1000 x 1.84 = 3,614 jobs). This commercial area provides for the development of regional level projects that include uses such as offices, retail establishments and urban style housing, which is consistent with the proposed general plan amendment for this area. Refer to **Figure 9**, Proposed Land Use Plan, which depicts the location of the commercial parcels in relation to the overall Woolf Crossing Community.

In order to provide for the greatest potential for success, the PAD incorporates the ability to facilitate a number of potential development plans that include the development of an all employment project, an all retail project or a mixed-use project that integrates employment, retail and residential. All of the potential development plans are consistent with the General Plan land use designation of Entertainment Mixed Use.

The Commercial Parcel is located within the twelve-mile Loop 303 freeway corridor, from Bell Road south to Interstate 10. Though there are several regional commercial projects planned along this segment of the Loop 303 freeway, this corridor remains primarily undeveloped. As commitments from employers and retailers are secured by projects along the Loop 303 freeway corridor, the development plans for the remaining planned regional commercial projects along this corridor must be updated. The flexible development plan provided by the PAD is necessary to allow the Commercial Parcel to update its development plan to reflect any changes that may be required due to changes in market conditions.

Additionally, the site selection criteria for employers and retailers evaluating regional commercial projects along the Loop 303 corridor will include an evaluation of existing development rights. The Commercial Parcel's flexible development plan will provide an employer or retailer with existing development rights and the elimination of the negative implications that may be attributed to the required rezoning of a potential site.

Land Use Overview

As described earlier, the mix of uses that will be developed on the site has not yet been determined. This section of the PAD will define the general development parameters for the broader land uses that are permitted in the commercial land use category. The following is a brief description of the development potential of the employment, retail and residential uses within the Commercial Parcel:

Employment Uses. The PAD provides the flexibility to establish the location, configuration and size of the employment area at a future date as the market demand and specific requirements for employment uses are determined. For specific development standards proposed for the Employment Uses, such as maximum floor area Ratio (FAR), refer to Section 6.5, **Table 4**.



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Retail Uses. The PAD provides the flexibility to establish the location, configuration and size of the retail area at a future date as the market demand and specific requirements for retail uses are determined. For specific development standards proposed for the Retail Uses, such as maximum floor area Ratio (FAR), refer to Section 6.5, Table 4.

Residential Uses. A maximum of eighty (80) acres of the total commercial area shall be permitted for the development of residential uses within Parcels A and B. The residential uses will be integrated with the employment and retail uses to be developed within the commercial area. While the PAD provides the flexibility to establish the location, configuration, and size of the residential area at a future date as the market demand and specific requirements for residential uses are determined, the total amount of land utilized for residential purposes may not exceed 80 acres. The amount of residential uses proposed and developed within Parcels A and B will be updated with each Design Review submittal, and at the time of final plans.

(1) Permitted Uses (Parcels A and B)

The PAD as it pertains to Permitted Uses is structured to be consistent with the overall intent of providing for the greatest potential for success and to provide the necessary flexibility required to meet the specific requirements of employers and retailers seeking to locate within the Loop 303 corridor. The Permitted Uses for the Commercial parcels are specifically addressed as follows:

a. Permitted Uses

(1) Employment Uses.

The Employment Permitted Uses shall also include any use not specifically listed below that is permitted within the General Office (G-O) district pursuant to the Zoning Ordinance of the City of Glendale in effect at the time of the approval of the PAD (Ordinance) as either a Permitted Use or an Accessory Use.

- a. Professional, administrative, or business offices.
- b. Hospitals.
- c. Business support services.
- d. Personal services businesses, such as beauty shops and barber shops.
- e. Financial institutions (with or without drive-through facilities).
- f. Real estate and insurance offices.
- g. Medical and dental offices and clinics.
- h. Libraries and museums.
- i. Business trade schools, provided that all facilities are within fully-enclosed structures.
- j. Medical and clinical laboratories.
- k. Retail stores.

(2) Retail Uses:

The Retail Permitted Uses shall also include any use not specifically listed above that is permitted within the General Commercial (C-2) and Community Shopping Center (CSC) districts pursuant to the Ordinance as



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either a Permitted Use or an Accessory Use.

- a. Retail stores - general merchandising (variety, discount department, specialty).
- b. Retail stores - food stores.
- c. Retail stores - apparel and accessory.
- d. Retail stores - home and office furnishings.
- e. Retail stores - hardware stores.
- f. Retail stores - home improvement stores.
- g. Retail stores - warehouse stores.
- h. Appliance, furniture and household equipment rentals.
- i. Retail services for small appliances, bicycles, watches, musical instruments, and similar items.
- j. Appliance, furniture and household equipment rentals.
- k. Minor automobile repair including lubrication, oil-change, tires, engine tune-ups, washing and polishing, brakes, muffler, transmission, radiator and similar maintenance uses.
- l. Music and dance schools.
- m. Child care centers.
- n. Restaurants.
- o. Restaurants with outdoor dining and catering.
- p. Restaurants without drive-through facilities.
- q. Restaurants with drive-thru facilities a minimum of three hundred (300) feet away from a single family lot.
- r. Cocktail lounge or bar.
- s. Financial institutions, real estate and insurance offices.
- t. Financial institutions without drive-through facilities.
- u. Financial institutions with drive-through facilities a minimum of three hundred (300) feet away from a single-family lot.
- v. Professional, administrative, and business offices.
- w. Medical and dental clinics.
- x. Veterinary clinics, all activities within an enclosed building.
- y. Business and trade schools.
- z. Business support services.
- aa. Personal services such as barber and beauty shops, shoe repair, and tailor shops.
- bb. Laundry, cleaning, and dry cleaning establishments for retail customers only limited to a maximum of one thousand (1,000) square feet of floor area to be occupied by or devoted to machinery to be used for laundry, cleaning, dyeing, and finishing work.
- cc. Hotels, motels and other lodging facilities.
- dd. Indoor motion picture theaters, excluding adult theaters.
- ee. Indoor recreational facilities.

(3) Residential Uses:

- a. Multi-family dwellings.
- b. Mixed-use residential dwellings integrated into commercial



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buildings.

c. Accessory Uses.

b. Uses Subject to Conditions.

(1) Retail Uses:

- a. Seasonal sales and special events subject to Ordinance Sections 7.501 and 7.503.
- b. Wireless communication facilities, subject to Ordinance Sections 7.506 and 7.600:
 - i. Building mounted antennas and rooftop mounted antennas.
 - ii. Alternative tower structure mounted antennas that utilize an existing light pole or electric utility pole. The related equipment shelter must be located on property developed for non-residential use or in public right-of-way subject to approval of the City of Glendale Engineer.
- c. Live entertainment facilities which include music by more than one (1) musician, or dancing. Such facilities can be approved through administrative review, if the entrances and exits to the building are located more than three hundred (300) feet from any residential use. The dance floor may not exceed one-eighth (1/8) of the total floor area. No adult entertainment uses permitted. The closing time of the dance floor shall be simultaneous with the closing of the bar or cocktail lounge.

(2) Residential Uses:

- a. Public utility facilities required for local service, provided that there are no offices, maintenance facilities, outdoor storage, or full-time employees related to the site.
- b. Group Homes.

c. Uses Subject to Conditional Use Permit:

(1) Employment Uses:

- a. Child Care Center.
- b. Restaurants with drive-thru facilities within three hundred (300) feet from a single family lot.

(2) Retail Uses:

- a. Outdoor recreational facilities;
- b. Restaurants with drive-thru facilities within three hundred (300) feet of a single family lot.
- c. Convenience uses, unless otherwise identified as a permitted use in the PAD.
- d. Live entertainment facilities including nightclubs which include: music performed by more than one musician, or dancing. Exits and entrances to the structure are less than three hundred (300) feet from any existing or planned residential use. The closing time of the dance floor shall be simultaneous with the closing of the bar or cocktail lounge. No adult entertainment uses permitted.



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- e. Retail users: Retail user with a gross floor area equal to or greater than 75,000 square feet of gross area.
- f. Financial institutions with drive-through facilities less than three hundred (300) feet away from a single-family lot.
- g. Retail gasoline sales.
- h. Car washes – self service or automated.
- i. Retail stores - less than seven thousand five hundred (7,500) square feet where food and drink is sold primarily for consumption off premises.
- j. Wholesale sales.
- k. Plant nurseries that are accessory to a main retail use.
- l. Automobile, truck, recreational vehicle and trailer leasing and rental facility with on-site storage.
- m. Motor vehicle dealerships and accessory uses, including motor vehicle leasing and rental, engine and collision repair fueling stations and car washes.

(3) Residential Uses:

- a. Home child care center.
- b. Churches, on property located at the intersection of two (2) collector streets or fronting or siding on an arterial street.
- c. Private schools, on property located at the intersection of two (2) collector streets or fronting or siding on an arterial street.
- d. Shelter care facilities.
- e. Nursing homes.
- f. Home Occupations (Class II): See Section 7.304 of the Glendale Zoning Ordinance.
- g. Congregate care facility.

C. Luke Compatible Land Use (LCLU) Category

The Woolf Crossing Master Plan will establish employment areas to support the expanding residential communities in the vicinity, while removing the potential for residential land uses beneath Luke AFB's noise contours. The proposed employment areas will assist in balancing the jobs to population ratio in the area by creating the potential for appropriate employment uses such as manufacturing and warehousing. Specifically, the anticipated industrial employment centers proposed in the Woolf Crossing PAD comprise approximately 212 acres of employment or 55.8 acres per 1000 population. At an average FAR of 0.2, this corresponds to over 1,800,000 square feet of employment. Using an average of 350 square feet per job, this equates to over 5,250 jobs. Acting in concert with the employment areas, Woolf Crossing's residential areas will provide an available labor pool for the significant employment opportunities within the proposed development as well as home ownership opportunities for employees who desire to relocate to an area close to where they work. Residents within Woolf Crossing will be able to enjoy employment opportunities directly adjacent to them, which will also serve to lessen home to work commuting distances, thereby reducing the impact to the area's transportation network. The location of the employment area near the Loop 303 and Northern Parkway provides an incentive for timely development and job creation.



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(I) Permitted Uses (Parcels K, L, and M)

All permitted uses, uses subject to conditions, uses subject to conditional use permit, and accessory uses are subject to current Arizona State Statutes. The permitted uses within the LCLU area are as follows:

a. Permitted Uses

All permitted uses within the M-1 (Light Industrial) district, Section 5.842 of the City of Glendale Zoning Ordinance, and additionally the following manufacturing and non-manufacturing uses:

1. Manufacturing and Assembly.
 - a. Food and kindred products, except those requiring specific use permit approval.
 - b. Textile mill products not including dyeing and finishing.
 - c. Lumber and wood products.
 - d. Leather and leather products.
 - e. Stone, clay and glass products.
 - f. Primary metal industries.
 - g. Fabricated metal products.
 - h. Machinery and electrical machinery.
 - i. Transportation equipment.
 - j. Plastic and plastic products.
2. Non-Manufacturing.
 - a. Transportation, communication and other public utility storage and equipment yards.
 - b. Wholesalers.
 - c. Trucking and warehousing.
 - d. Lumber and building material yards.
 - e. Public and private utility facilities.
 - f. Storage Tanks.
 - g. Public or private water booster pump stations.
 - h. Wells for water facilities.

b. Uses Subject to Conditions.

1. Seasonal sales and special events. See Sections 7.501 and 7.503 of the Glendale Zoning Ordinance.
2. Wireless communication facilities, subject to Sections 7.506 and 7.600 of the Glendale Zoning Ordinance.
 - a. Building mounted antennas and rooftop mounted antennas.
 - b. Alternative tower structure mounted antennas which utilize existing light pole or electric utility pole. The related equipment shelter must be located on property developed for non-residential use or in public right-of-way subject to approval of City Engineer.

c. Uses Subject to Conditional Use Permit:

1. Manufacturing or processing of chemicals and allied products.



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2. Dyeing and finishing of textile products.
3. Manufacturer of rubber products.
4. Manufacturer of fireworks, matches, or pyrotechnics or other potentially explosive processes.
5. Central mixing plants for cement or concrete.
6. Incidental commercial retail sales other than those otherwise permitted.
7. Asphalt and asphalt products processing.
8. Fiberglass products manufacturing.
9. Wireless communication facilities-new monopole or changes to existing tower subject to development standards in Table 3-A of the Glendale Zoning Ordinance.
10. Wireless communication facilities-alternative design tower.
11. Wireless communication facilities-alternative tower structure, otherwise not permitted under Section 7.506 of the Glendale Zoning Ordinance.

d. Accessory Uses:

Uses which are customary and incidental to the principal use of the property.

1. Amateur radio tower.
2. Satellite earth station.
3. Microwave antennas.

D. Parks

Open space and pocket parks are distributed appropriately throughout the PAD. Refer to **Figure 12** Conceptual Trails and Open Space Master Plan, which illustrates the location of the pocket parks and open space areas. While 4.9 (net) acres have been designated for a private neighborhood park, it is envisioned that in total, approximately 44.8 acres within the Woolf Crossing residential area will be utilized for open space and parks, comprising 21.2 percent of the net area. Additionally, it is anticipated that 7.0 percent of the gross commercial and LCLU area will be designated as open space, or approximately 31 acres.

Amenities in the neighborhood park will provide for active recreational uses and may include playgrounds, soccer fields, or basketball courts and ramadas with tables and barbeque grills. Typical in today's communities, maintenance of these amenities will fall to the Homeowner's Associations (HOAs) that will be established within Woolf Crossing.

Pocket parks of one acre or more in size distributed throughout the neighborhoods for convenient access by the residents. Amenities will be provided in the pocket parks and will include such items as tot lots, playground equipment, ramadas and picnic tables.

The neighborhood park, pocket parks, and various open spaces will be interconnected to the residential communities and commercial centers through the use of concrete multi-use trails, pedestrian pathways and bicycle lanes. The elementary school and the various parks and open space will benefit and be enjoyed by the residents of Woolf Crossing, providing a necessary location for community gatherings, active recreational uses and enhancement of the visual attractiveness and identity of Woolf Crossing.



E. Elementary School

As shown on **Figure 14**, Woolf Crossing is located entirely within the Dysart Unified School District jurisdictional boundary. There are no existing educational facilities located in Woolf Crossing. However, several school sites are proposed nearby and will be dedicated to the Dysart Unified School District. Two miles to the west, a 15 acre elementary school site is located in the center of the White Tank Foothills development. Just to the north of that proposed school site, a 14.9 acre elementary school site is proposed as part of the Cortessa development. Approximately one and one-half miles to the north, an elementary school site is proposed in the Greer Ranch development.

The closest existing educational facilities in the Dysart Unified School District are Dysart Elementary School and Dysart High School located at Dysart Road, just north of Peoria Avenue (approximately 4 miles to the northeast of the Property). Estrella Mountain Community College is located at the northwest corner of Dysart and Thomas Roads, which is approximately 8 miles southeast of the site.

Members of the Project Team have met with the Dysart Unified School District regarding the District's needs relative to the proposed development. The School District has stated that it will be requesting one elementary school site within Woolf Crossing. To allow for adequate access and to place the school adjacent to the most homes possible, the school site is centrally within the portion of the development north of the proposed Northern Parkway, on the south side of the collector street. The school site is located next to the neighborhood park, which may allow for the sharing of recreational facilities between the school and the park. Dysart Unified School District has reviewed the location and acreage of the school site and has agreed that this is an acceptable location and size.

6.3 Architecture

A. Residential Architecture (Parcels C, D, E, H, I, and J)

The residential architecture includes numerous quality design elements. Each subdivision within Woolf Crossing will have a minimum of four models with three distinct elevations. These elevation types include, but shall not be limited to, Santa Barbara, Craftsman, or Desert Prairie with rustic stone style. Color schemes are prominent earth tones. Typical colors are identified in **Appendix C**. The following architectural features and details create these three distinct styles:

Santa Barbara (Elevation A): A mix of radius top and square top windows with grids, that are recessed, decorative ironwork, predominant use of gable roofs at 5:12 pitch with s-tile, decorative iron details, clay-tile decorative gable vents, stucco archways, and gable end stucco eave returns.

Craftsman (Elevation B): Predominately square top windows with grids and shutters, decorative stucco window accents, body pop-outs, and corbels at gable ends. A significant use of simulated wood siding at eaves and at second story massing. Mixed use of hip and gable end roofs at a maximum 5:12 pitch with flat roof tile.



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Desert Prairie (Elevation C): All square top recessed windows with grids and occasional use of shutters. Significant use of stone veneered walled elements that are standard. This elevation theme incorporates the predominant use of hip roofs at a 4:12 pitch with flat roof tile, visual breaks to emphasize strong horizontal lines, and the use of rows of small windows on several elevations.

Additional elevation styles may be introduced at Woolf Crossing, but will adhere to the quality identified in these elevations.

At this time, four distinct product offerings are planned for Woolf Crossing, with home widths of forty feet, fifty feet, fifty-five feet, and sixty-five feet. These different model offerings will help to create distinct neighborhoods within Woolf Crossing with appeal to a broad market. The homes sizes will range from 2,300 square feet to over 4,300 square feet. Standard home features include concrete tile roofs, covered patios and stone veneers (depending on architectural style). Additionally, a minimum of two elevations within each product type will include side entry garages or forward living spaces, which eliminate the presence of a garage dominate streetscape.

Appendix C includes examples of architectural elevations and floor plans to identify the high quality and varied design features envisioned for Woolf Crossing.

B. Commercial Architecture (Parcels A, and B)

The architectural concept for Woolf Crossing is intended to create a distinctive appearance through a mixture of building forms, colors and architectural treatments. The intent is to create a strong visual character for the site, a prominent entry to Glendale, located at the intersection of the 303 Freeway and Northern Parkway.

Each building will include discernible articulation on all sides and longer buildings will include treatments such as windows, accent features, use of varying materials or other similar architectural treatments.

Parking canopies, freestanding and accessory structures, or other similar features will utilize architectural treatment that is consistent with the building.

Allowable building materials may include:

- Architectural steel
- Aluminum
- Glass
- Granite, marble or stone
- ACM (Architectural Composite Metal) Panels
- Brick
- Cast in place, tilt-up or pre-cast concrete with a finished exterior surface
- Concrete masonry units with architectural features, such as split face block
- Standing seam metal roofs



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- Other similar materials approved through the Design Review Process

Prohibited materials:

- Wood siding
- Metal siding
- Asphalt shingles

C. LCLU Architecture (Parcels K, L, and M)

The architectural concept for Woolf Crossing is intended to create a distinctive appearance through a mixture of building forms, colors and architectural treatments. The intent is to create a strong visual character for the site, a prominent entry to Glendale, located at the intersection of the 303 Freeway and Northern Parkway.

Each building will include discernible articulation on all sides and longer buildings will include treatments such as windows, accent features, use of varying materials or other similar architectural treatments.

Parking canopies, freestanding and accessory structures, or other similar features will utilize architectural treatment that is consistent with the building.

Allowable building materials may include:

- Architectural steel
- Aluminum
- Glass
- Granite, marble or stone
- ACM (Architectural Composite Metal) Panels
- Brick
- Cast in place, tilt-up or pre-cast concrete with a finished exterior surface
- Concrete masonry units with architectural features, such as split face block
- Standing seam metal roofs
- Other similar materials approved through the Design Review Process

Prohibited materials:

- Wood siding
- Metal siding
- Asphalt shingles



6.4 Development Master Plan(s)

The PAD incorporates the ability to facilitate a number of potential development plans for parcels designated as Commercial (Parcel A, and B) and LCLU (Parcels, K, L, and M). These development plans may include employment uses, retail uses, or a mixed-use project that integrates employment, retail, and residential uses. As the specific mix of uses within these parcels is not known at this time, an additional administrative review process will be added to the normal City of Glendale review process to ensure that the final land use mix and site plan are consistent with the quality, character and intent of the PAD. The additional process will be comprised of the following requirements:

1. Submittal of a separate Development Master Plan for Commercial Parcel A, Commercial Parcel B, LCLU Parcel K, Parcel L, and Parcel M shall occur when either a Design Review or Conditional Use Permit application (if necessary) is filed for a specific user, building, or group of buildings located within such Commercial or LCLU Parcel. The applicant, without the filing of either a Design Review or Conditional Use Permit application, may file a Development Master Plan. If a Development Master Plan is filed without a Design Review or Conditional Use Permit application, the Plan shall be processed in the same manner as a Design Review application.
2. The Development Master Plan shall include the site plan for the Design Review or Conditional Use Permit project, along with proposed land uses, representative building locations, circulation (vehicle, bicycle, pedestrian), comprehensive sign plan, parking and landscaping for the remainder of the subject Commercial or LCLU parcel.
3. At the time of application, the Planning Director, or their representative, may determine that the area of the DMP may be less than the remainder of the subject parcel if it is determined that sufficient land area is included in the DMP to satisfy the intent of Section 6.4.1-2 above.
4. The Development Master Plan shall illustrate how the specific land use that is the subject of the Design Review or Conditional Use Permit application can be successfully integrated with the land uses, circulation and landscaping identified for the remainder of the subject Commercial or LCLU Parcel.
5. The Development Master Plan shall be reviewed and approved simultaneously with the Design Review application or prior to the Conditional Use Permit going to public hearing.
6. A Development Master Plan may be amended as part of the review and approval of a Design Review application or Conditional Use Permit. A Development Master Plan may be amended, if requested by an applicant, without the filing of either a Design Review or Conditional Use Permit application, and shall be processed in the same manner as a Design Review application.
7. A Development Master Plan shall not be required for private and public utility facilities that are screened by a solid wall.



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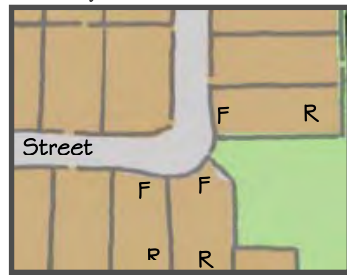
6.5 Development Standards

Table 3: Residential Development Standards (Parcels C, D, E, H, I, and J)

Development Standard	Parcel C	Parcel D	Parcel E	Parcel H	Parcel I	Parcel J
Minimum Lot Width	60'	65'	65'	70'	85'	70'
Minimum Lot Depth ⁽¹⁾	125'	130'	130'	125'	135'	125'
Minimum Lot Area	7500	8450	8450	8750	11475	8750
Front Yard Setback ⁽²⁾⁽³⁾	15	20'	20'	15	20'	15
Rear Yard Setback ⁽⁴⁾	25'	25'	25'	25'	25'	25'
Side Yard Setback ⁽⁵⁾	5/10'	5/10'	5/10'	5/10'	10/10'	5/10'
Minimum Distance Between Buildings	15' ⁽⁶⁾	15' ⁽⁶⁾	15' ⁽⁶⁾	15' ⁽⁶⁾	20'	15' ⁽⁶⁾
Street Side Yard Setback	10'	10'	10'	10'	10'	10'
Maximum Structure Height	30'	30'	30'	30'	30'	30'
Maximum Lot Coverage	45%	45%	45%	47%	40%	47%

Notes:

- (1) Minimum lot depths may be decreased by ten (10) feet at cul-de-sacs and knuckles as long as minimum lot areas and setbacks are adhered to.
- (2) Front yard setback less than twenty (20) feet will only be used on products with side entry garages or forward living spaces. A minimum of twenty (20) feet from face of garage door to property line shall be provided for forward-facing garages
- (3) Front yard setbacks shall be staggered by a minimum of three (3) feet on adjacent lots, with a range of six (6) feet or more provided on the same block. An exhibit depicting the front setback staggers shall be submitted to the City prior to final plat approval.
- (4) The rear yard shall be measured from the rear lot line. Rear lot line is defined as the lot line most nearly opposite to the front property line. In the event that the front property line is a curved line, then the rear property line shall be the lot line that is consistent with rear lot lines on adjacent or nearby lots. (See exhibit below)



Legend
 F = Front
 R = Rear

- (5) The specific location of the 10' building separation will be determined at the time of building permit approval, subject to Administrative Approval by the Planning Director or their designee in accordance with the City of Glendale Zoning Ordinance Section 3.402.



Table 4: Commercial Development Standards (Parcels A, and B)

Development Standard	Employment Uses	Retail Uses		Residential Uses (3)	
		Exclusive of Motor Vehicle Dealerships	Motor Vehicle Dealerships	Single-Family Attached	Multi-family
Minimum Developable Site Area	N/A - None	N/A - None	N/A - None	N/A - None	N/A - None
Minimum Width	N/A - None	N/A - None	N/A - None	N/A - None	N/A - None
Minimum Depth	N/A - None	N/A - None	N/A - None	N/A - None	N/A - None
Maximum Density	N/A	N/A	N/A	8 DU per Acre	30 DU per Acre
Maximum FAR	1.00	0.50	0.50	N/A	N/A
Minimum On-site Landscaping / Open Space	20% of total site area	20% of total site area	5% of total site area	20% of total site area	20% of total site area
Landscape Setback (1) (2)					
Olive, Sarival, Northern Ave.	20 feet	20 feet	20 feet	20 feet	20 feet
Northern Parkway, Loop 303, Loop 303 frontage road, and all other public streets	10 feet	10 feet	10 feet	10 feet	10 feet
Perimeter Setback (1)					
Olive Ave., Sarival Ave., Northern Ave., Northern Parkway, Loop 303, Loop 303 frontage road	30 feet	30 feet	30 feet	30 feet	30 feet
All other public streets	20 feet	20 feet	20 feet	20 feet	20 feet
Front Setback (1)					
Olive Ave., Sarival Ave., Northern Ave., Northern Parkway, Loop 303, Loop 303 frontage road	30 feet	30 feet	30 feet	20 ft. to face of front facing garage - 15 ft. to living or side load garage	20 ft. to face of front facing garage - 15 ft. to living or side load garage
All other public streets	20 feet	20 feet	20 feet	20 feet	20 feet
Side Setback (1)	Varies With Building Height (1 foot per 1 foot height of bldg.)	50 feet adjacent to residential, and 15 feet adjacent to non-residential uses	50 feet adjacent to residential, and 15 feet adjacent to non-residential uses	20 foot perimeter setback	20 feet
Street Side Setback (1)					
Olive Ave., Sarival Ave., Northern Ave., Northern Parkway, Loop 303, Loop 303 frontage road	30 feet	30 feet	30 feet	20 feet	20 feet
All other public streets	20 feet	20 feet	20 feet	20 feet	20 feet
Rear Setback (1)	50 feet adjacent to residential, and 15 feet adjacent to non-residential uses	50 feet adjacent to residential, and 15 feet adjacent to non-residential uses	50 feet adjacent to residential, and 15 feet adjacent to non-residential uses	20 feet	20 feet
Distance between Structures	N/A	N/A	N/A	(See Perimeter Setback)	(See Perimeter Setback)
Lot Coverage	See Maximum FAR	See Maximum FAR	See Maximum FAR	50%	50%
Maximum Building Height	96 feet	96 feet	96 feet	30 feet	96 feet

Notes

1. Measured from property line.
2. Refer to Section 6.8.A.1 for additional landscape requirements.
3. A maximum of eighty (80) acres out of the total Commercial acreage (Parcels A and B) may be utilized for residential uses.



Table 5: LCLU Development Standards (Parcels K, L, and M)

Development Standard	LCLU Uses
Minimum Net Lot Area	43,000 Square Feet
Maximum Lot Area	N/A
Minimum Building Setback (1)	
Front Setback (2)	25 feet
Side Setback (2)	60 feet
Rear Setback (2)	60 feet
Street Side Setback	60 feet
Maximum Structure Height (3)	30 feet
Maximum FAR	0.30
Minimum On-site Landscaping / Open Space	5% of the net site area or 10% of the ground floor area of all buildings, whichever is greater
Landscape Setback (4)	
Olive Avenue, Northern Avenue, and Reems Road	20 feet
Northern Parkway and all other public streets	10 feet

Notes:

1. Building setback for arterial streets shall be a minimum of 1 foot for each foot of building height.
2. 60 feet to residential Uses: 15 feet to non-residential uses.
3. Maximum height of accessory structures is 15 feet.
4. Refer to Section 6.8.A.1 for additional landscape requirements.

6.6 Performance Standards

All employment, retail and residential uses shall be subject to the City of Glendale’s Zoning Ordinance, Commercial Design Expectations and Multiple Residence Housing Design Guidelines in effect at the time of the approval of the PAD (Regulations) except in the event that such Regulations conflict or are inconsistent with any provision of the PAD. In the event of such conflict or inconsistency, the PAD shall prevail. These exceptions shall include the following:

A. Residential Performance Standards

Residential uses shall meet the residential guidelines and minimum standards within the Glendale Zoning Ordinance, except as otherwise modified within the PAD.

B. Commercial Performance Standards

1. Uses or operations of products on these parcels shall be permitted unless such uses are or may become obnoxious or offensive by reason of the emission of odor, dust, smoke, noise, gas fumes, cinders, vibrations, glare, refuse, or air or water pollution.
2. Explosive or hazardous processes require approval by the Glendale Fire Department



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that all manufacturing, storage, and waste processes meet all safety and environmental standards as administered by the department.

3. All uses permitted in this district shall be primarily conducted within a fully enclosed building except automotive service stations, motor vehicle dealerships, parking lots, drive-ins or drive-thru facilities, and amusement and recreational activities. Outside storage of materials and equipment related to the primary activity is permitted provided that the outside storage area is screen by a wall with the design and height to be approved by the Community Development Group.
4. There shall be no manufacturing, compounding, processing, or treatment of products other than that which is clearly incidental to a retail store or business, and where all such completed products are sold at retail on the premises.

C. LCLU Performance Standards

1. Uses or operations of products on these parcels shall be permitted unless such uses are or may become obnoxious or offensive by reason of the emission of odor, dust, smoke, noise, gas fumes, cinders, vibrations, glare, refuse, or air or water pollution.
2. Explosive or hazardous processes require approval by the Glendale Fire Department that all manufacturing, storage, and waste processes meet all safety and environmental standards as administered by the department.
3. All uses permitted in this district shall be primarily conducted within a fully enclosed building unless otherwise permitted. Outside storage of materials and equipment related to the primary activity is permitted provided that the outside storage area is screened by a wall with the design and height to be approved by the Community Development Group.

6.7 Walls and Monumentation

Perimeter improvements, such as theme walls and entry monumentation will be coordinated with the other design aspects to create unity, and enforce the identity of the Woolf Crossing Community. In particular, theme walls and entry monumentation establish the initial definition of the Community upon arrival. To reinforce Woolf Crossing's unique character, the following design elements, which also incorporate concepts from the City's Residential Design and Development Manual (RDDM) are proposed:

- a. Enhanced arterial and collector entrances using landscape tracts, feature lighting, monument signage, and distinctive theme walls.
- b. Entry features will be integrated with the development and will use similar materials laced throughout the development walls and amenities. The community identity will be classical in appearance utilizing founders finish block with a aged brick appearance accentuated with white Trendstone block and ornamental concrete caps to reinforce a traditional "Estate" theme. The colors will be harmonious with a traditional Estate theme and will convey a subtle elegance.
- c. Variations in the theme wall will be achieved by a variety of means, such as but not limited to staggered centerlines, pilasters, varying heights, extra plant materials, alternating materials, or patterns, or breaks, or other suitable means.
- d. Where retaining walls are necessary, they will be compatible with theme walls, in terms of color, and materials.
- e. View fencing shall occur in appropriate locations where lots back onto



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common open space areas.

By utilizing these design elements, the Woolf Crossing walls and monumentation will be cohesive to the overall characteristics of the area, and will serve to unify the community's identity and architectural theme.

6.8 Open Space and Landscape Theme

The vision for Woolf Crossing includes a variety of neighborhoods that are linked together by areas of community activity, such as parks, open space, trails, and the elementary school. Various types of amenities are provided within Woolf Crossing, promoting resident interaction that builds a strong sense of neighborhood. In particular, the open space has been designed to provide a variety of activities for all age groups, such as walking, basketball, youth soccer, tot lots, and ramadas. Retention areas meander through the development, acting as a greenbelt, and have been incorporated into the open space theme, creating both active and passive recreational opportunities.

To complement this diverse range of amenities, the design will incorporate provisions for landscape treatments within the public right-of-way, common landscaped areas, as well as treatments for private property. The Homeowners Associations will be able to further refine and enforce the residential guidelines as necessary, in keeping with the Woolf Crossing Community principals and objectives. **Figure 11**, Conceptual Landscape Master Plan Exhibit, **Figure 12**, Conceptual Trails and Open Space Master Plan, along with **Figure 13A**, Conceptual Neighborhood Park, and **Figures 13B-D** Conceptual Pocket Parks, provide the basic landscape concepts that will guide the development of the design guidelines and the initial infrastructure development for the project.

The landscaping and design theme will reflect a character of a traditional pastoral park setting while complementing the surrounding White Tank Mountains with strategic use of Sonoran Desert Planting to provide a tie to the surrounding land uses. Native and introduced species as included on the Arizona Department of Water Resources low water use plant list will be utilized throughout Woolf Crossing. In particular, the landscape plan and plant palette are designed to provide an attractive street appearance, while buffering the more intensive office/employment uses from the residential areas. In addition, open space is provided around the main entrances of the neighborhoods, creating focal points and scenic views from the surrounding streets. Enhancements such as variations in wall patterns, plant materials, and other similar methods will allow the Woolf Crossing community to be easily recognized by a visitor or resident. However, Woolf Crossing will be designed and developed with a consistent landscape and streetscape theme throughout the community.

A. Landscape Buffers and Screening

Landscape buffers and screen wall requirements shall be in accordance with Section 7.200 of the Glendale Zoning Ordinance, except as modified below:

- I. Landscape setbacks within the Commercial Parcels (A&B) and LCLU Parcels (K, L, and M) shall comply with the landscape setback requirements identified in Table 4 and Table 5 respectively. Landscape setbacks shall be measured from the property line, that may only be broken by



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driveways, project monument signage, project entry features, screen walls and other utility or traffic improvements customarily located adjacent to a public or private street. No parking shall be permitted within this area.

2. Notwithstanding this prohibition against parking within the landscape areas, a Motor Vehicle Dealership shall be permitted to utilize 20% of its landscape setback for vehicle display pads that may be illuminated and elevated to a maximum height of five (5) feet above the adjacent street grade. (Refer to Table 4 for more information.)
3. In the event that an employment or retail use is located adjacent to Northern Parkway, the Loop 303 or the Loop 303 frontage road, there shall be no requirement to construct a perimeter wall along this frontage. The required screen walls for an employment or retail use located along Northern Parkway, the Loop 303 or the Loop 303 frontage road is limited to a parking lot screen wall not less than three (3) feet six (6) inches in height as required for any adjacent parking areas and a truck loading dock screen wall, constructed at or near the building and limited to a maximum height of 14', to screen any truck loading dock or outside storage area visible from Northern Parkway, the Loop 303 or the Loop 303 frontage road.
4. The perimeter on-site improvements of each employment and retail center that is comprised of the landscaping, sidewalks and perimeter walls must be constructed with the first phase of development. The parking lot screen walls may be phased and constructed in conjunction with the corresponding parking area.
5. All uses that include retail sales of gasoline shall be designed to orient the gasoline service pumps and canopies covering the pumps to the interior of the site with the buildings adjacent to the street. This requirement shall not be applicable to self-service gas stations permitted as a primary or accessory use.

B. Management and Maintenance

Homeowners associations (HOAs) will own, manage, and maintain all common open space areas and facilities within each community. In addition to the common tracts owned, the HOAs will assume the maintenance responsibility for median landscaping and landscaping within the public right-of-way adjacent to all major and minor arterial and collector roadways within the community's boundary. The purchasers of property within Woolf Crossing community will automatically become members of the HOA and will be required to pay annual dues for the operation and maintenance of the community facilities.

6.9 Site Lighting

On-site lighting shall comply with the Outdoor Light Control Ordinance.

The following lighting design standards are permitted:

- Site lighting shall be provided by poles with a maximum height of thirty-five (35) feet that will be shielded, where necessary, to avoid light spillover onto adjacent parcels or public streets.
- Maximum height of pole-mounted lighting within one hundred and fifty (150) feet of a single family lot is fifteen (15) feet. Fixtures shall meet the IESNA standards for full cut-off.
- The light poles located outside of parking lot landscape islands shall include an architecturally enhanced concrete base with a maximum height of four (4) feet.



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- The light poles shall be located on the site to provide the project minimum light levels with no requirement to locate the light poles in landscape planters or other designated areas.

6.10 Signage

A. Residential Signage

Monument entry signs will be permitted at primary and secondary entrances to the Master Development on the arterial streets. The lettering will be a maximum of twenty-four (24) inches high, with a maximum sign area of 120 square feet on each side of the entry. See **Figure 21** for the Entry concept and Figure 24 for the Entry Monumentation Location Exhibit. The residential signage for Woolf Crossing shall comply with the City of Glendale's signage ordinance with the following additions:

Permanent Subdivision Identification Signs. A permanent sign used to identify a recorded subdivision within the Master Development.

1. Such signs shall not exceed twenty-four (24) square feet in area. A twenty-four (24) square foot sign may be display on one or both sides of a street providing direct access to the subdivision and serving as a major entry;
2. Secondary entrance subdivision identification signs shall be incorporated into the subdivision perimeter walls;
3. Such signs shall consist of only the name of the subdivision for which the sign is intended;
4. Such signs shall not include any advertising copy;
5. Such signs may be only externally illuminated. No internal lighting allowed.

B. Commercial Signage

Signage shall be in compliance with Section 7.104.B and 7.104.C of the Glendale Zoning Ordinance.

C. LCLU Signage

Signage shall be in compliance with Section 7.104.C of the Glendale Zoning Ordinance.

6.11 Parking Standards

A. Residential Parking Standards

Parking will be in compliance with Section 7.400 of the Glendale Zoning Ordinance.

B. Commercial Parking Standards

Parking will be in compliance with Section 7.400 of the Glendale Zoning Ordinance.

C. LCLU Parking Standards

Parking will be in compliance with Section 7.400 of the Glendale Zoning Ordinance.



6.12 Recreational and Community Facilities

Approximately four and one-half miles to the west lies the White Tank Mountain Regional Park operated by the Maricopa County Parks and Recreation Department. The White Tank Mountain Regional Park totals 29,217 acres making it the largest park in the County system. Most of the Park is made up of the rugged and beautiful White Tank Mountains, which are a freestanding range separating the Phoenix Basin of the Salt River Valley from the Hassayampa Plain.

Figure 14 shows the locations of libraries within the vicinity of Woolf Crossing. The Maricopa County Library District operates two branch libraries and a new regional library near Woolf Crossing. These are the El Mirage Branch Library at El Mirage Road just north of Waddell Road, Hollyhock Branch Library north of Greenway Road just west of El Mirage Road and the Northwest Regional Library just north of Greenway and west of Bullard Road. Within five miles of Woolf Crossing, located in the Surprise Recreation Complex in the City of Surprise, the Northwest Regional Library has recently opened. It is anticipated that the Maricopa County Library District will request a quality of life assessment for each dwelling unit for future library service based on the Library District's standards.

Woolf Crossing is located near several public and semi-private golf courses. The Falcon Dunes Golf Course is located at the northeast corner of Northern Avenue and Reems Road, directly east of the Property. Falcon Dunes is a semi-private course open to active and retired military and their families. The Property is approximately six miles away from the Wigwam Resort, including the Blue, Red and Gold Golf Courses. The Arizona Traditions, Happy Trails, and Desert Springs Golf Courses are all located less than six miles to the north in the City of Surprise.

The Flood Control District is in the process of designing a regional storm water conveyance and storage facility to be placed parallel to the Reems Road alignment to the east of the Woolf Crossing Development. The FCD is interested in utilizing an estimated 60 acre parcel approximately ¼ mile north of the Olive and Reems Road intersection as a shared use recreational facility. The parcel is currently under the jurisdiction of Maricopa County. However, several municipalities are interested in incorporating the land to fold into their recreational plans. Potential uses may include extensive trails systems, multiple softball and/ or soccer fields, and sports courts among other opportunities. With the close proximity to this potential facility, the recreational opportunities for Woolf Crossing residents are substantial.

6.13 Phasing

Woolf Crossing community will be developed in multiple phases. Actual timing of the phases will depend on market conditions and absorption. It is expected that in general phasing will begin with the parcels between Sarival Avenue and a north-south line tangent to the G5 Ldn noise contour. The second phase will be the quarter section adjacent to the southeast corner of the future Loop 303 and Olive Avenue. The third and last phase is expected to be the mixed-use employment parcels between the G5 Ldn noise contour and Reems Road. Refer to **Figure 10** for a graphical depiction of the Phasing Plan areas. Sub-phases may be considered in order to accommodate infrastructure construction and the construction of model homes. **Table 6** below shows the anticipated phasing



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schedule.

Table 6: Phasing Schedule

Phase	Anticipated Start of Construction	Anticipated Build-Out Date
1	2006	2010
2	2008	2015
3	2010	2020



Infrastructure



7.1 Transportation/Traffic Circulation

Woolf Crossing will be supported by a multimodal transportation network of streets, pedestrian paths, and bicycle facilities. The project will be served by internal local streets along with collector streets located both north and south of the proposed Northern Parkway. Currently the adjacent arterial streets are only two lane, rural County roads. Another benefit of this PAD will be the assurance to the City that at the time of build-out approximately four and one-half miles of arterial half-streets will be brought up to City standards.

The planning and future design process will also establish the creation of bicycle paths and multi-use trails to promote modes of transportation such as walking and biking as an alternative to the automobile. This will lead to less reliance on the automobile and accordingly less gasoline consumption, air, and noise pollution. In addition to encouraging other modes of travel, the land planning process through the proposed mix of residential and commercial areas, will encourage reduction in the length of trips. As commercial and retail services will be close by, the length of travel to take advantage of these services will be much shorter. The shorter length of travel will also translate into less pollution effects by the automobile.

A. Vehicular

Due to the project's location relative to the future Loop 303 Freeway, the proposed Northern Parkway, Reems Road, Olive, Sarival and Northern Avenues, ingress and egress to both the arterial transportation network as well as the regional freeway systems will be easily accomplished for Woolf Crossing. To provide an analysis of the proposed circulation elements, a Traffic Impact Study (TIS) for Woolf Crossing has been prepared by CivTech, dated April, 2006, and has been submitted in its entirety under separate cover as part of this PAD. The Executive Summary of the TIS is located in **Appendix E**.

Although the proposed Northern Parkway is supported by the Maricopa County Department of Transportation (MCDOT) and the City of Glendale, and with the recent passage of Proposition 400 has funding designated in MAG's Regional Transportation Plan, the right-of-way for the Parkway has not yet been acquired. It is anticipated that this right-of-way will eventually be acquired through purchase by MCDOT. Refer to **Figure 15** proposed Street Circulation Map, and for street cross-sections, see the **Figure 16A, 16B, and 16C**.

The traffic circulation component of Woolf Crossing is consistent with the *Northwest Valley Transportation Study* (the Study), prepared for Maricopa County, adopted June 7, 2000 and the City of Glendale General Plan 2025 - Specialized Transit Service Plan, effective December 2002. As shown in the Study and the Specialized Transit Service Plan, there are no long-term mass transit services recommended west of Litchfield Road, which is two miles to the east of Woolf Crossing. Also, in the long-term there are no park-and-ride facilities or transit centers recommended west of Litchfield Road. Therefore, as mass transit is not anticipated to occur in this part of the West Valley in the long-term, Woolf Crossing will not be providing bus stops or park-and-ride facilities at this time. Should public transit be extended into this area, bus stops may be placed along arterial streets as determined by future Valley Metro Plans. Additionally, as no golf courses are planned for Woolf Crossing, golf cart paths will not be constructed within the development. Year 2020 background traffic projections taken from the Study were



used in Woolf Crossing traffic analysis and proposed long-term functional classification of the roadways adjacent to Woolf Crossing are identical to those found in the Study.

B. Pedestrian

Sidewalks, or concrete multi-use trails on both sides of arterial and collector streets, within the rights-of-way and landscape tracts will provide excellent pedestrian circulation. On arterial streets, the pedestrian paths/sidewalks will be detached from the curb and gutter and buffered by a landscape strip to separate the various modes of transportation, i.e., auto, bicycle, pedestrian. Pedestrian circulation will also be provided for with sidewalks on all residential streets. Pedestrian connections will be provided to connect parks, open space and schools to the neighborhoods.

C. Bicycle

Figure 12, Conceptual Trails and Open Space Master Plan Exhibit, identifies the locations of concrete multi-use trails, collector streets and a preliminary layout of the first phase residential streets for the development. The residential streets will have 4' wide sidewalks and collectors within the development will have 6' wide concrete multi-use trails in addition to the travel lanes. Arterials will have 8' wide concrete multi-use trails. The sidewalks and multi-use trails will serve as a means to provide recreational opportunities as well as to promote alternative means of mobility, other than the automobile, through the community.

Bike lanes will be provided on Olive Avenue and all collector streets. It is anticipated that bicycle circulation will be accommodated by the bicycle lanes provided adjacent to these roadways. Where bicycle paths are contained within the right-of-way, a painted travel lane will be created adjacent to the curb and gutter, consistent with the City of Glendale standards.

Recreational bicycle circulation may utilize the arterial street network, however, the recreational demand will most likely be satisfied by the multi-use trails connecting the various open spaces described in Section 5.0. Also, it is anticipated that much of the recreational demand will be accommodated by the 21 miles of shared-use trails and the 10-mile competitive mountain bike track in the nearby White Tank Mountain Regional Park.

7.2 Drainage

A Master Drainage Study for Woolf Crossing, prepared by CMX, L.L.C., is submitted to the City separately. The drainage design for Woolf Crossing is in accordance with the design guidelines in the Drainage Design Manual for Maricopa County, Arizona, Volume I, Hydrology, January 1995 and the Drainage Design Manual for Maricopa County, Arizona, Volume II, Hydraulics, January 1996.

Assumptions for developed conditions were made based on the associated unit densities for each parcel. As land-planning progresses for the community, revisions to this drainage master plan may be appropriate to represent modifications in flow paths, offsite conditions, and retention. In addition, as individual parcels are developed (i.e. preliminary plat or site plans are prepared), each parcel will be required to submit individual drainage plans and studies, as necessary, to indicate conformance with the assumptions and



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guidelines reflected in the Master Drainage Plan. The concepts and design guidelines provided within this Drainage Master Plan may be amended with the approval of the City of Glendale Engineering Department.

Subsequent to the draft ADMP, the Draft, Volume IV, Level III ADMP Update Report was created (URS, August 2004). This report provides alternatives, and a selected alternative, which incorporate the regional drainage projects being in place. This includes drainage channels and regional retention basins, which are intended to reduce the impacts of flooding within the area.

Woolf Crossing will be designed to route offsite flows through or around the project, maintaining historical drainage patterns, and to retain the 100 year, 2 hour storm event. The primary drainage structure that reroutes existing conditions flows upstream of Woolf Crossing is the future construction of the future Loop 303 Freeway. Part of the design of this freeway is a parallel drainage channel. This channel will divert all flows that are generated west of the future Loop 303 Freeway. Two other facilities that will impact Woolf Crossing's drainage design are the proposed Northern Parkway and the Maricopa County Flood Control project to design and construct a regional drainage channel on the west side of Reems Road.

The timing of the future Loop 303 Freeway and associated drainage improvements are close to the proposed development schedule of Woolf Crossing; therefore, they are assumed to be in place in for the drainage analysis. This assumption will allow for the design and construction of drainage structures that will not be grossly oversized for the life of the project. This concept has been presented to the Flood Control District and the Maricopa County Department of Transportation and was considered a feasible approach as long as negative impacts on the adjacent property owners are not created, and that the finished pad elevations are one-foot above the 100-year storm water elevation without the future Loop 303 Freeway channel in place.

One additional constraint on Woolf Crossing is the railroad tracks on the north side of Olive Avenue. The ultimate half-street cross-section will not fit within the area between the Railroad right-of-way and the section line. The railroad track may be abandoned in the near future, but if it is not, the alignment of Olive Avenue will have to be adjusted southward onto Woolf Crossing. The land north of Olive Avenue is a future project called Prasada. Due to the unknown status of the railroad track abandonment, the master drainage plan shows that a temporary channel is proposed to be constructed in the re-aligned Olive Avenue north half-street right-of-way. This channel will be designed so that it can convey the peak flows from the 100-year, 24-hour existing conditions, flowing full without freeboard. When the Loop 303 is constructed and Prasada is developed, the temporary channel can be removed from the north half-street and a permanent channel constructed in the Prasada development to convey the off-site flows along the north side Olive Avenue into the Reems Road Channel.

The south side of the site contains a similar situation along Northern Avenue, except that the majority of the responsibility to manage storm water flows remains with Woolf Crossing. A channel will be constructed to convey the ultimate flows that will also convey higher interim flows. The ultimate half-street will also be utilized for storm water conveyance. Homes adjacent to this channel will be elevated at least 1-foot above the



water surface elevation to provide the necessary protection from the 100-year storm. Refer to Woolf Crossing Master Drainage Report (submitted to the City of Glendale under separate cover) for a detailed account of the information described above.

7.3 Public Utilities and Services

Utility services to Woolf Crossing will include: electrical service by APS, phone service by Qwest, natural gas service by Southwest Gas and cable television by Cox Communications. The City will provide police, fire protection, and refuse collection. Currently, there are few existing utility facilities adjacent to Woolf Crossing area. However, utility service extensions to the area are expected to be imminent with the development of the proposed master plans to the North and West of the Property.

Woolf Crossing is within the Arizona Public Service (APS) service area. APS has facilities providing service on Woolf Crossing site for two existing farm well pumps. APS also has existing services adjacent to Woolf Crossing for the Prasada Packing Facility located on the north side of Olive Avenue. APS has recently completed a Facility Siting Project for the West Valley which encompasses Woolf Crossing area. The project included siting three 230 kilovolt (kV) substations and twelve 69kV substations, as well as their associated power lines. **Figure 17** shows the approved facility siting exhibit published by APS, which designated the west side of the future Loop 303 Freeway between Bethany Home Road and Olive Avenue for the placement of the 230kV transmission lines. Also, one 230kV substation, TS2, has been sited near Woolf Crossing at the northwest corner of Olive Avenue and the future Loop 303 Freeway.

According to information obtained from Qwest, buried phone cable is located along the Olive Avenue right-of-way, along Northern Avenue to service Clearwater Farms, and along Camelback Road to service Beautiful Arizona Estates.

Woolf Crossing is located within the Southwest Gas service area, but currently there are no gas facilities to the site. Gas may be extended from a 4" distribution main located at Peoria Avenue and Sarival Road.

7.4 Wastewater System

Currently, no wastewater collection infrastructure exists on, or in the vicinity of Woolf Crossing. Existing low density residential developments in the County are utilizing on-site individual septic systems to collect and treat their wastewater flows. The proposed collection system for Woolf Crossing is planned for discharge to the existing Palm Valley wastewater treatment plant, owned and operated by the Litchfield Park Service Company (LPSCO). LPSCO has expressed willingness to expand its wastewater service area to include Woolf Crossing project area.

A Master Wastewater Study for Woolf Crossing was prepared by CMX, L.L.C. A regional sewer master plan has been proposed to provide sanitary sewer service to this portion of the County. The conceptual plan is titled the Litchfield Park Service Company Northwestern Maricopa County Regional Master Sewer Study (CMX, October 2004).

Woolf Crossing, in addition to other developments in the area including Prasada and the



SAK Family Partnership, have jointly participated in a regional sewer study performed by CMX. This study has determined that these developments can feasibly connect via a gravity sewer line to an existing LPSCO lift station at Sarival and McDowell Avenues. The study shows that the wastewater can then be pumped to the existing Palm Valley wastewater treatment (WWTP) plant on McDowell Road west of Litchfield Road. When the capacity is reached at the existing WWTP, a new WWTP is proposed in the location of the lift station. Refer to **Figure 18** and **Figure 19**, On-site and Off-site Wastewater Plan. In order to accomplish the expansion of the wastewater service area, a MAG 208 amendment must be approved and a line extension agreement executed with LPSCO.

If market demands, infrastructure cost, timing of construction or other factors create the need for Woolf Crossing site to connect to a different wastewater source or provider, an appropriate alternative plan will be identified, studied, and pursued at that time, subject to the approval of the City of Glendale Engineering Department. Refer to the Master Wastewater Study for Woolf Crossing (submitted to separately) for a more detailed account of the proposed wastewater system.

7.5 Potable Water System

A Master Water Study for Woolf Crossing, prepared by CMX, L.L.C., has been submitted to the City of Glendale as part of this PAD. Woolf Crossing is located entirely within the Arizona American Water Company service area. The design criteria used for Woolf Crossing potable water system were taken from the Arizona American Water Company (AAWC) Development Guide, Revised September 17, 2003. Refer to **Figure 20** for the Conceptual Water Master Plan.

The Water Master Plan identifies the size and proposed locations for major water distribution infrastructure based upon the AAW Development Guide. This infrastructure includes water mains, and PRVs. The pipe network shown in this plan forms the pressure distribution system required for transmitting potable water to each parcel within Woolf Crossing. Based on discussions with AAWC, the ultimate water source will be the AAWC's Surface Water Treatment Plant (SWTP). This plant will be located in the vicinity of the Beardsley Canal and Cactus Road. The SWTP is estimated to be brought online in early 2008. Prior to the completion of this plant, Woolf Crossing's water supply will be provided by an onsite well with a redundant water source approved by the Arizona Water Company. The interim water solution provides a groundwater well for the early phase(s) of development of Woolf Crossing. The water from this well will be conveyed via a transmission line to the Loop 303 Corridor Booster Pump Station. This Booster Pump Station will be located in Parcel K of Woolf Crossing, within the 65 Ldn noise contour and adjacent to Parcel E.

Any required treatment will be performed at these booster pump stations. Following treatment and the necessary pressure boost, the potable water will be conveyed back to Woolf Crossing through the distribution network described in this study. Once the SWTP comes online, this well will serve as a backup water supply, and the primary water source will become the SWTP.

The proposed layout for the water distribution system consists of 8-inch to 16-inch water mains connecting the parcels within Woolf Crossing. The adjacent regional water



Section 7.0 - Infrastructure

lines range up to 36-inches at the discharge of the BPS. All pipes were sized to maintain a minimum peak hour pressure of 40 pounds per square inch (psi) and deliver the required fire flow while maintaining a residual pressure of 20 psi. During all demand scenarios a velocity of less than 10.0 fps occurs in each member of the network. The master report represents a layout of the backbone water infrastructure for the development and is subject to modification through the process of engineering development. Any changes to the approved Water Master Plan will require review and approval by AAWC and City of Glendale Engineering Department. A detailed potable water analysis will be submitted with each individual parcel or phased construction plans for review and approval by AAWC.

If market demands, infrastructure cost, timing of construction, or other factors create the need for Woolf Crossing site to connect to a different water source or provider, an appropriate alternative plan will be identified, studied, and pursued at that time, subject to the approval of the City's Engineering Department. Refer to the Master Water Study for Woolf Crossing (submitted to City of Glendale under separate cover) for a more detailed account of the proposed potable water system.



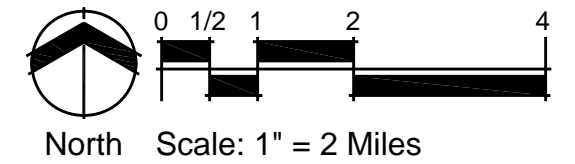
FIGURES

Woolf Crossing








Glendale, Arizona
Planned Area Development

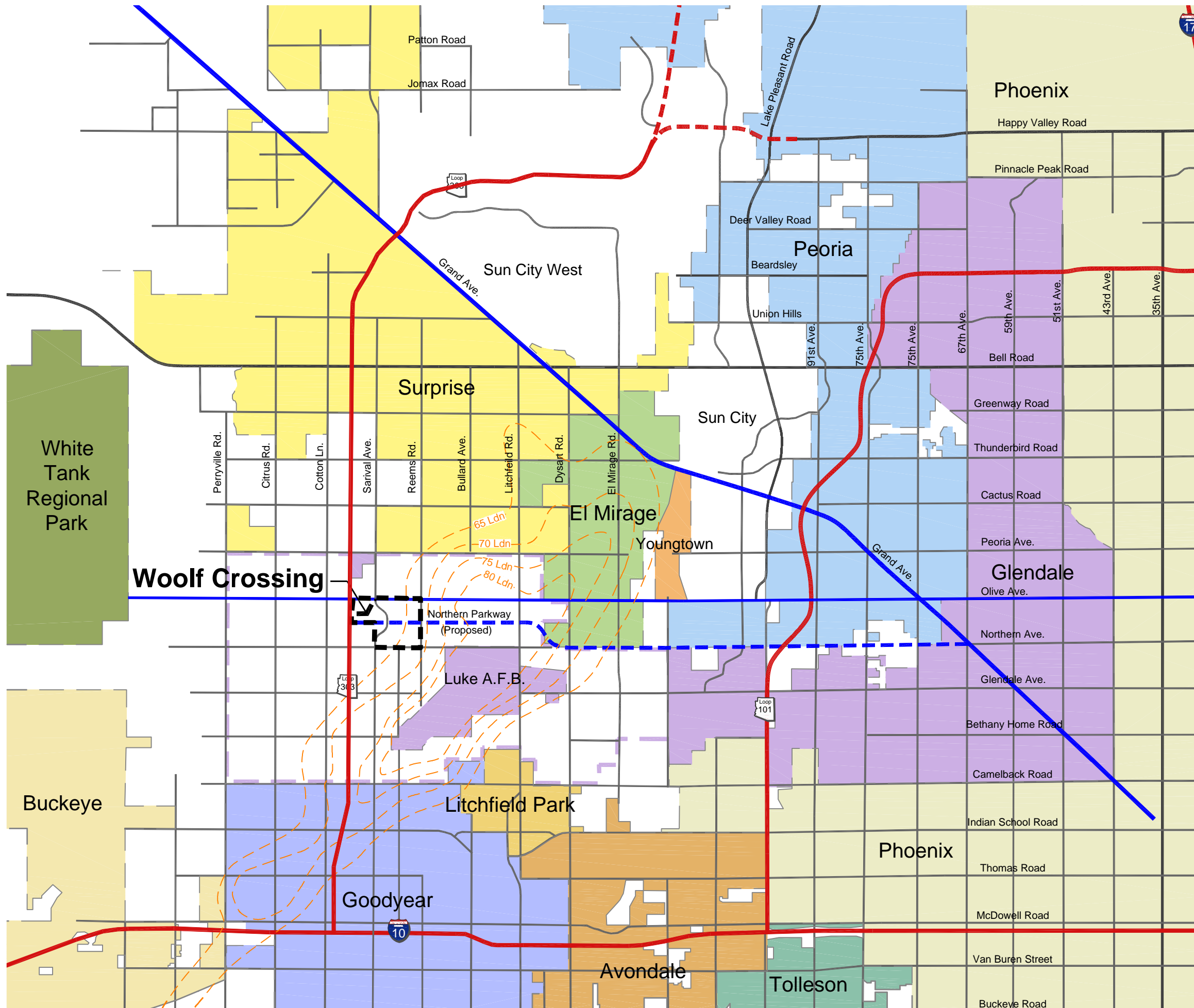
Regional Vicinity Map

Figure 1



Legend

-  Project Boundary
-  Super Street (Proposed)
-  Street of Regional Significance
-  Freeway
-  Arterial Road
-  City of Glendale Municipal Planning Boundary
-  Luke AFB Ldn Contours



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Graphics By: N/A

Drawn By: J.Newbegin / S.Posillico



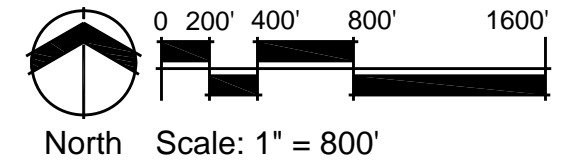
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Woolt Crossing

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Aerial Image

Figure 2



Legend

 Project Boundary



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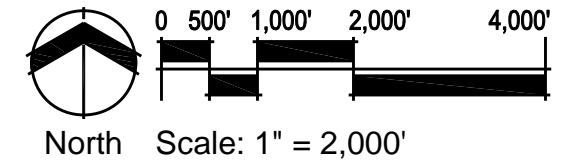


Woolf Crossing

Glendale, Arizona
Planned Area Development

Surrounding Zoning Exhibit

Figure 3



Legend

- Woolf Property Boundary
- Adjacent Development Boundary
- Proposed Northern Parkway

City of Glendale

- Agricultural (A-1)
- Planned Area Development (PAD)

City of Surprise

- Planned Area Development (PAD)

County

- Rural Residential (R-43)
- Single Family Residential (R1-35)
- Single Family Residential (R1-18)
- Single Family Residential (R1-10)
- Single Family Residential (R1-8)
- Single Family Residential (R1-7)
- Single Family Residential (R1-6)
- Commercial
- Industrial
- Golf Course

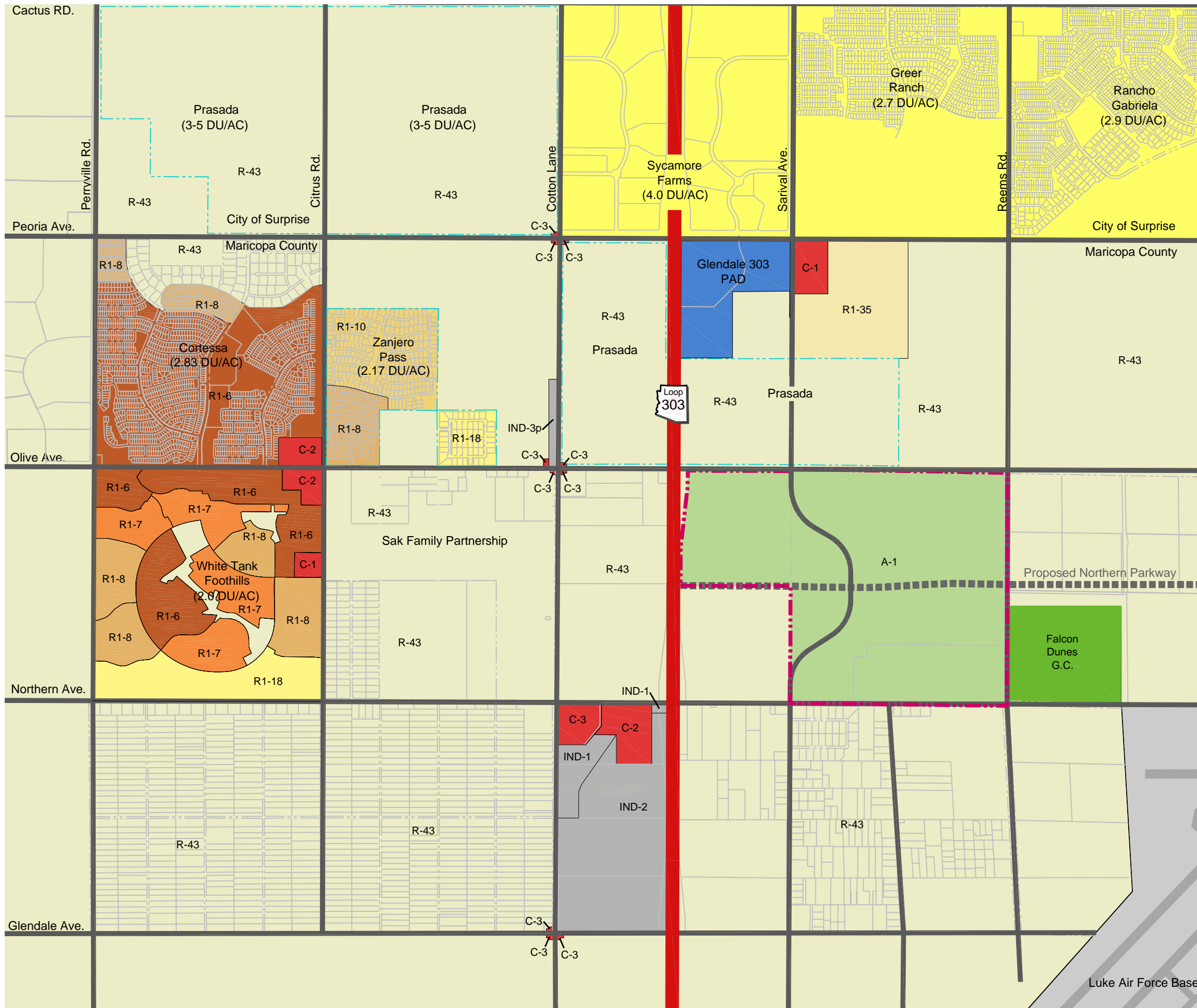
Source: Maricopa County Geographic Information Systems Portal. 11/29/2004

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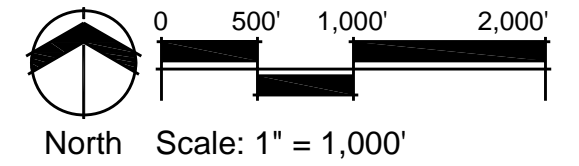


Woolt Crossing

Glendale, Arizona
Planned Area Development

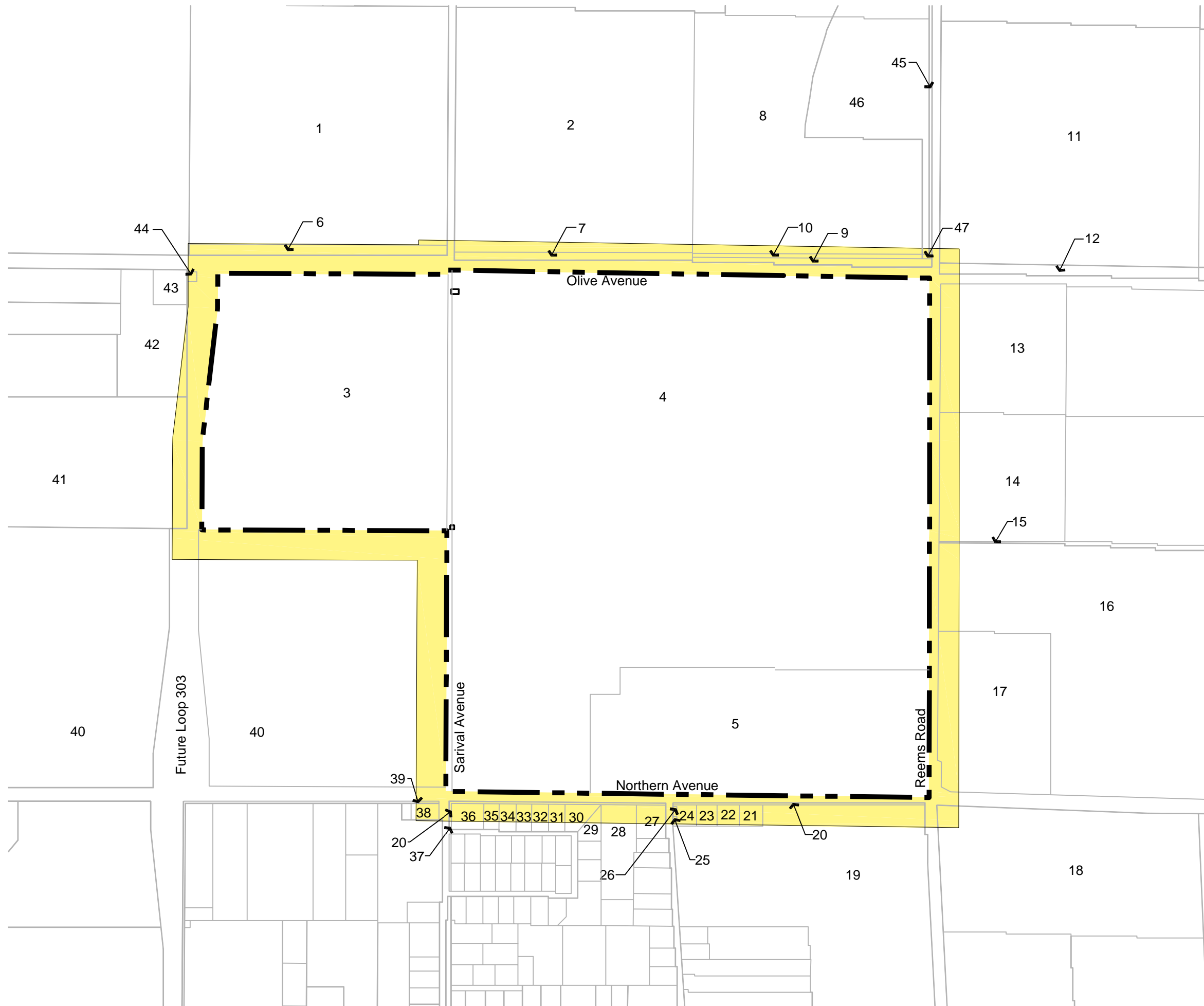
Adjacent Property Owners Map

Figure 4



Legend

- Project Boundary
- 300' Boundary Offset



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March 2006
Project Manager: D. Burrows
Designed By: A. Pangus
Graphics By: N/A

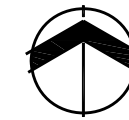
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Adjacent Stakeholders List

Figure 4-B



North

Legend

Adjacent Property Owners within 300-feet			
Map Ref #	Property Owners within 300' of Project	Address	Assessors Parcel #
1,2	Property Reserve Inc.	PO Box 511196 Salt Lake City, UT 841511196	501-06-008-A, 501-41-004-A
3,4	Woolf Family Enterprises LTD Partnership	8805 N Reems Rd Waddell, AZ 853550000	501-05-001-A, 501-48-004-A
5	Huron LLC	8805 N Reems Rd Waddell, AZ 85255	501-48-003-A
6,7	AT&SF	2500 Lou Menk Dr., PO Box 961089 Forth Worth, TX 761610089	501-06-010, 501-41-007
8	Rose Garden Estates LLC	4343 E Camelback Rd Ste 400 Phoenix, AZ 85018	501-41-005-B
9	AT&SF	5200 E Sheila St 1 Santa Fe Plaza Los Angeles, CA 900403906	501-41-008-B
10	Rose Garden Estates LLC	4343 E Camelback Rd Ste 400 Phoenix, AZ 85018	501-41-008-D
11	Wolf John JR/Bernice TR/Huron LLC	8805 N Reems Rd Waddell, AZ 85355	501-42-001
12	AT&SF	5200 E Sheila St 1 Santa Fe Plaza Los Angeles, CA 900403906	501-42-032
13,14	Woolf Family Enterprises LTD Partnership	8805 N Reems Rd Waddell, AZ 853550000	501-42-015, 501-42-013
15	Huron LLC	8805 N Reems Rd Waddell, AZ 85255	501-42-016-E
16,17	United States of America	13970 W Lightning St Glendale, AZ 853091149	501-42-016-F, 501-42-016-C
18	Northern Investors LTD Partnership	2525 E Arizona Biltmore Cir #118 Phoenix, AZ 85016000	501-50-001
19	Conklin Henry C/Patricia A	13001 W Solano Dr Litchfield, AZ 853400000	501-49-014-C
20	Adaman IRR WTR Dust #36	16251 W Glendale Ave Litchfield Park, AZ 85340	501-49-003
21	Wallick Janet Lee	15811 W Northern Ave Litchfield Park, AZ 85340	501-49-014-H
22	Thomas Johnnie Marie	15815 W Northern Ave Litchfield Park, AZ 85340	501-49-014-G
23	Ross Shirley J	15821 W Northern Ave Litchfield Park, AZ 85340	501-49-014-F
24	Sellers Maxine	15847 W Northern Ave Litchfield Park, AZ 85340	501-49-014-E
25,26	Adaman IRR WTR Dust #36	16251 W Glendale Ave Litchfield Park, AZ 85340	501-49-014-B, 501-49-004
27	White Trent /Tonya	15901 W Northern Ave Litchfield Park, AZ 85340	501-49-007-J
28	Hamlin William P/Stull Martha G	PO Box 390 Waddell AZ 85355	501-49-007-L
29,30	Thoroughbred Development Corporation	3308 N 61St PI Scottsdale, AZ 852515411	501-49-123, 501-49-122
31	Bailey Steven T/Vaneesa F	16114 W Lane Ave Litchfield Park, AZ 85340	501-49-121
32	Thoroughbred Development Corporation	3308 N 61St PI Scottsdale, AZ 852515411	501-49-120
33	O Brien Brian Mark	16138 W Lane Ave Litchfield Park, AZ 85340	501-49-119
34	Ensminger Dustin/Connie	16206 W Lane Ave Litchfield Park, AZ 85340	501-49-118
35	Clendenen Richard D/Hoffman Jonna Caroline	16218 W Lane Ave Litchfield Park, AZ 85340	501-49-117
36	Future Harvest Investment Corp	PO Box 654 Litchfield Park, AZ 85340	501-49-007-P
37	Thoroughbred Development Corporation	3308 N 61St PI Scottsdale, AZ 852515411	501-49-007-U
38	Wild Life World Zoo Inc	16501 W Northern Ave Litchfield Park, AZ 85340	501-04-007-J
39	Adaman IRR WTR Dist #36	16251 W Glendale Ave Litchfield Park, AZ 85340	501-04-003-A
40	Virgin Farms Partners	PO Box 3737 Salinas, CA 93912	501-05-003-A
41	Maricopa Packing Co	2600 S 7th Ave Phoenix, AZ 85007	501-05-002
42	Westside Wholesale Growers Inc	16739 W Olive Ave Waddell, AZ 85355	501-05-008-B
43	Prado Salvador JR/Sylvia M	16723 W Olive Ave Waddell, AZ 85355	501-05-008-C
44,45	Maricopa County MUN WTR CONS Dist #1	PO Box 900 Waddell, AZ 853550900	501-05-007-A, 501-41-009
46	Maricopa County Flood Control District	2801 W Durango St Phoenix AZ 85009	501-41-005-A
47	Maricopa County Flood Control District	2801 W Durango St Phoenix AZ 85009	501-41-008-C

CMX Project #: 7074.01

March 2006

Project Manager: D. Burrows

Designed By: A. Pangus

Graphics By: N/A

Drawn By: J.Newbegin / S.Posillico

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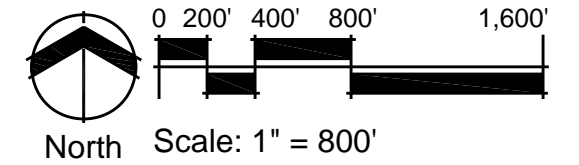
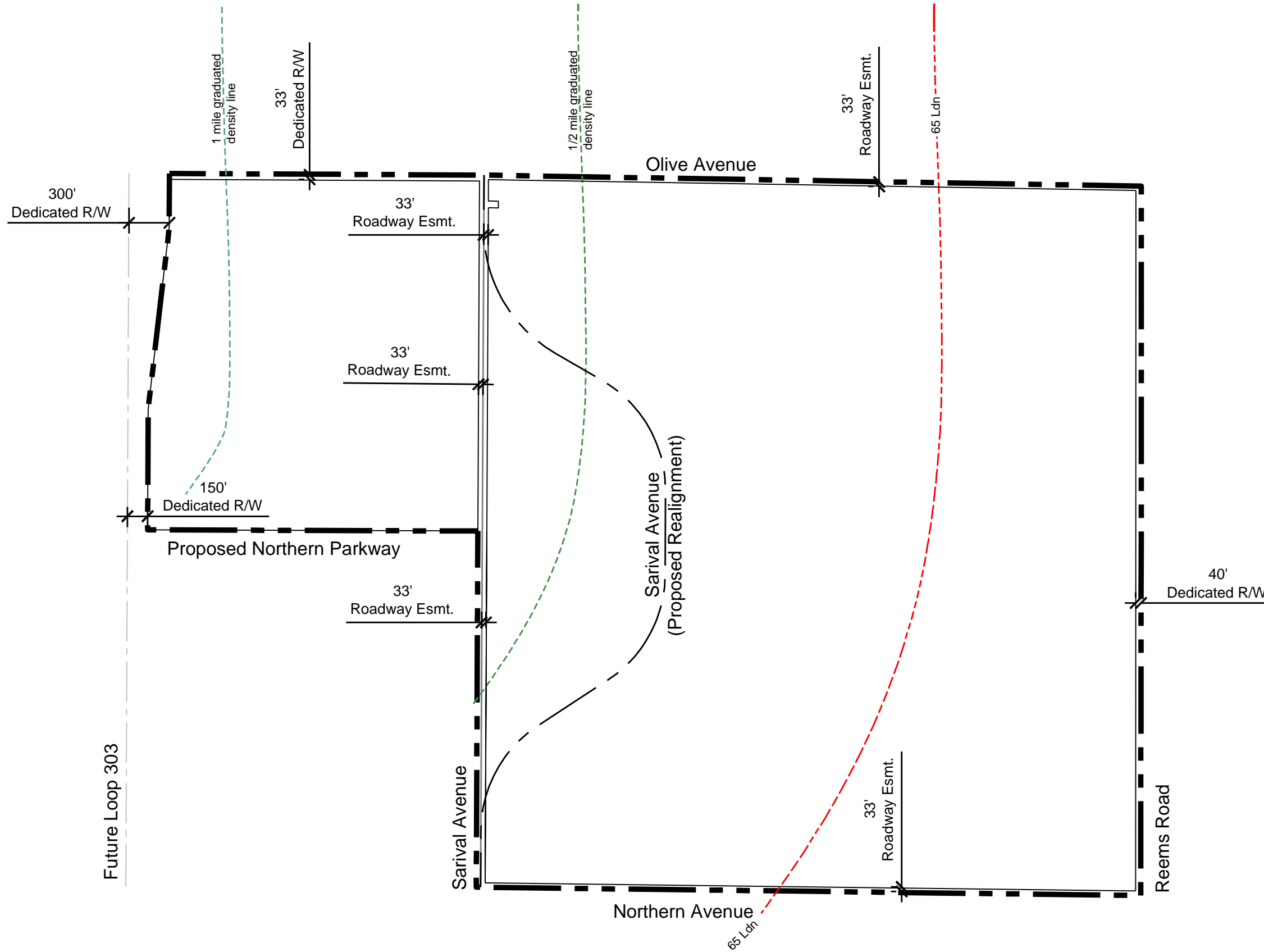


Woolt Crossing

Glendale, Arizona
Planned Area Development

Existing Rights-of-Ways

Figure 5



Legend

- Project Boundary
- Section Line
- Property Boundary
- 65 Ldn Noise Contours
- Half Mile Graduated Density Line
- One Mile Graduated Density Line

Source:
Maricopa County Streets Atlas,
4-18-2001
Traffic Impact Study,
Civtec December, 2004

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March 2006
Project Manager: D. Burrows
Designed By: A. Pangus
Graphics By: N/A

Drawn By: J.Newbegin / S.Posillico



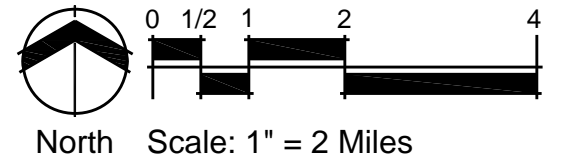
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Woolt Crossing

Glendale, Arizona
Planned Area Development

Luke Air Force Base Map

Figure 6



Legend

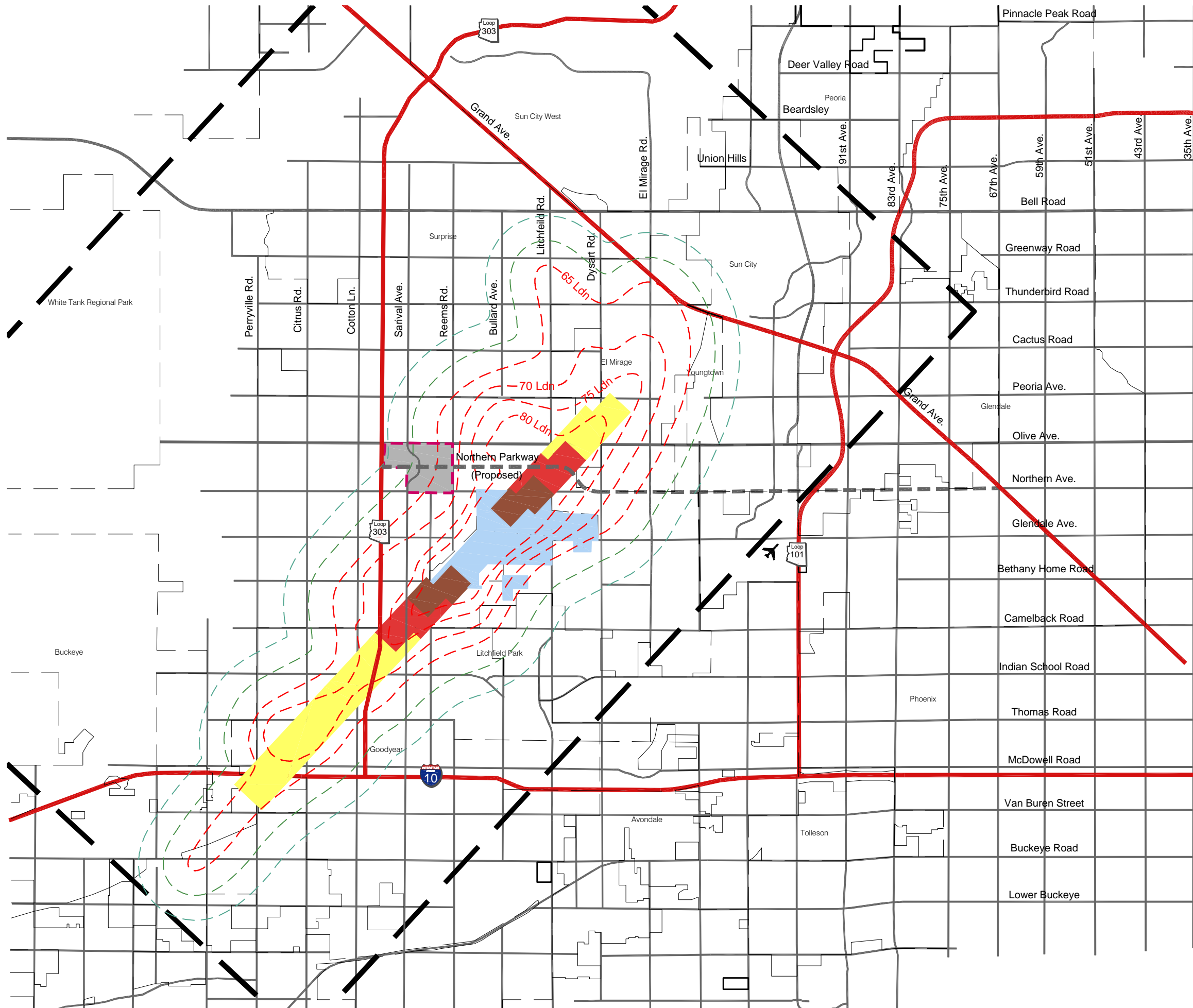
- Territory In the Vicinity of a Military Airport
- Ldn Noise Contours
- Half Mile Graduated Density Line
- One Mile Graduated Density Line
- Proposed Northern Parkway
- Glendale Municipal Airport
- Project Boundary
- Luke Air Force Base
- Clear Zone
- Accident Potential Zone 1
- Accident Potential Zone 2

Source: Luke Air Force Base

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Designed By: A. Pangus
Graphics By: N/A

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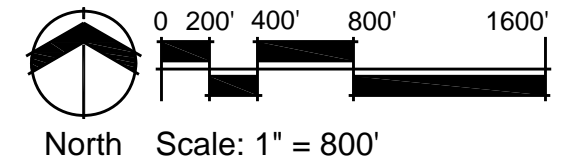
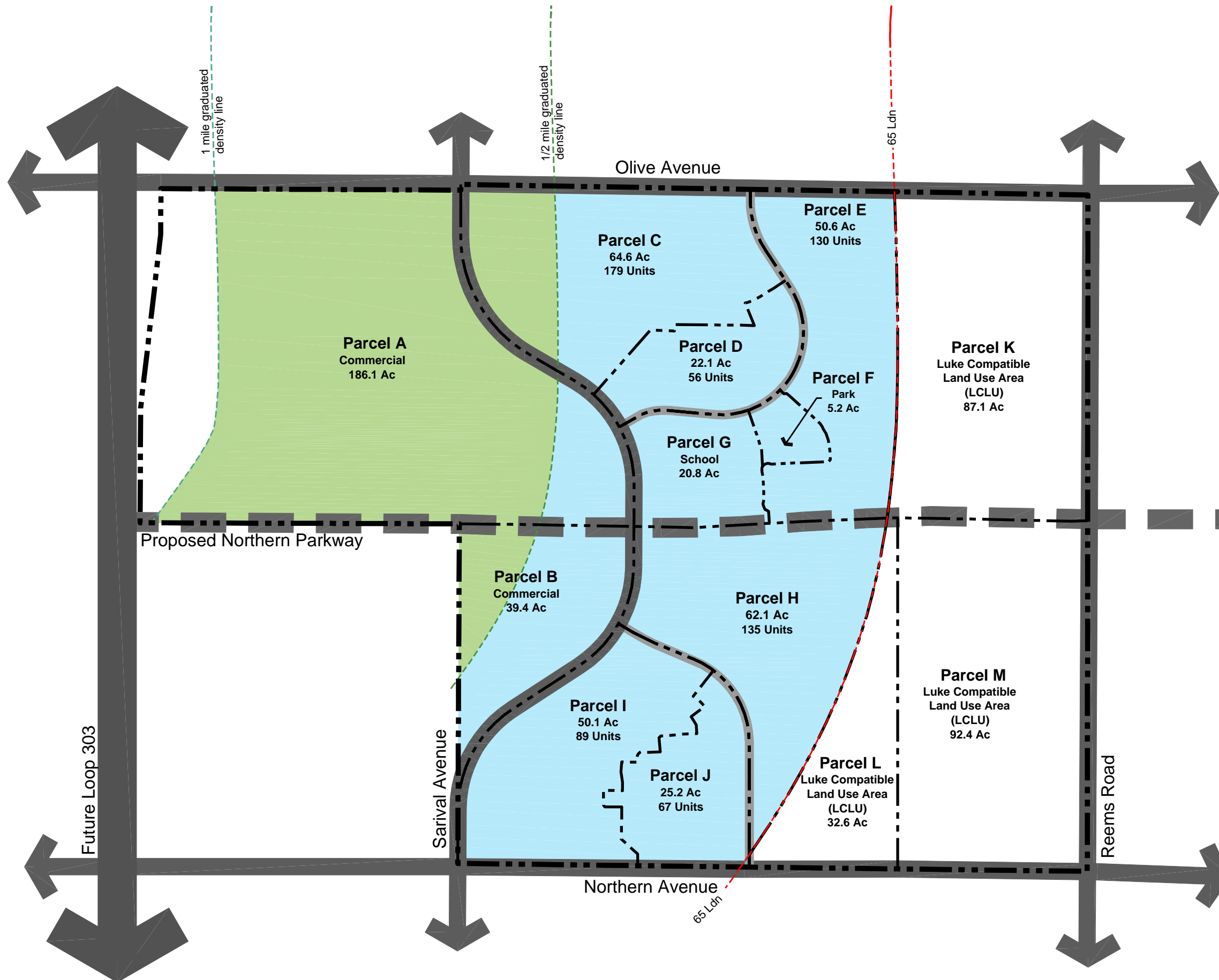


Woolt Crossing

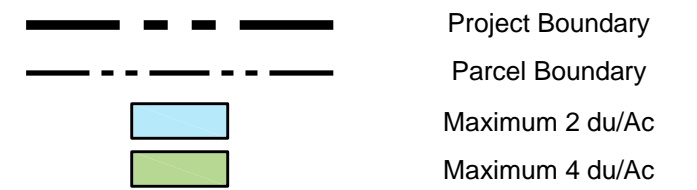
Glendale, Arizona
Planned Area Development

Luke AFB Graduated Density Exhibit

Figure 7



Legend



Site Data

Location	Gross Area (in AC)	Proposed Number of Units			Max No. of Units Allowed	Proposed Density (du/ac)
		West of Sarival Road*	East of Sarival Road	Total		
65 Ldn - 1/2 Mile GDL	324.9	39	610	649	549	2.0
1/2 Mile GDL - 1 Mile GDL	171.2	638	46	684	684	4.0
Total	496.1	677	656	1333	1333	

Note:
* The potential number of residential units west of Sarival Road is based solely on the number of units allowed through the Luke AFB Graduated Density Guidelines. No specific development plans are proposed for this area as part of the PAD.

Notes

- Population densities will not exceed 2 du/Ac within the 1/2 mile graduated density line and 4 du/Ac within the 1 mile graduated density line.
- There will be no homes within the 65 Ldn line.

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March 2006
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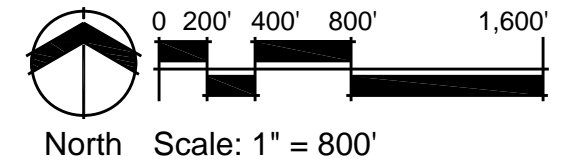


Woolt Crossing








Glendale, Arizona
Planned Area Development

Physical Features

Figure 8



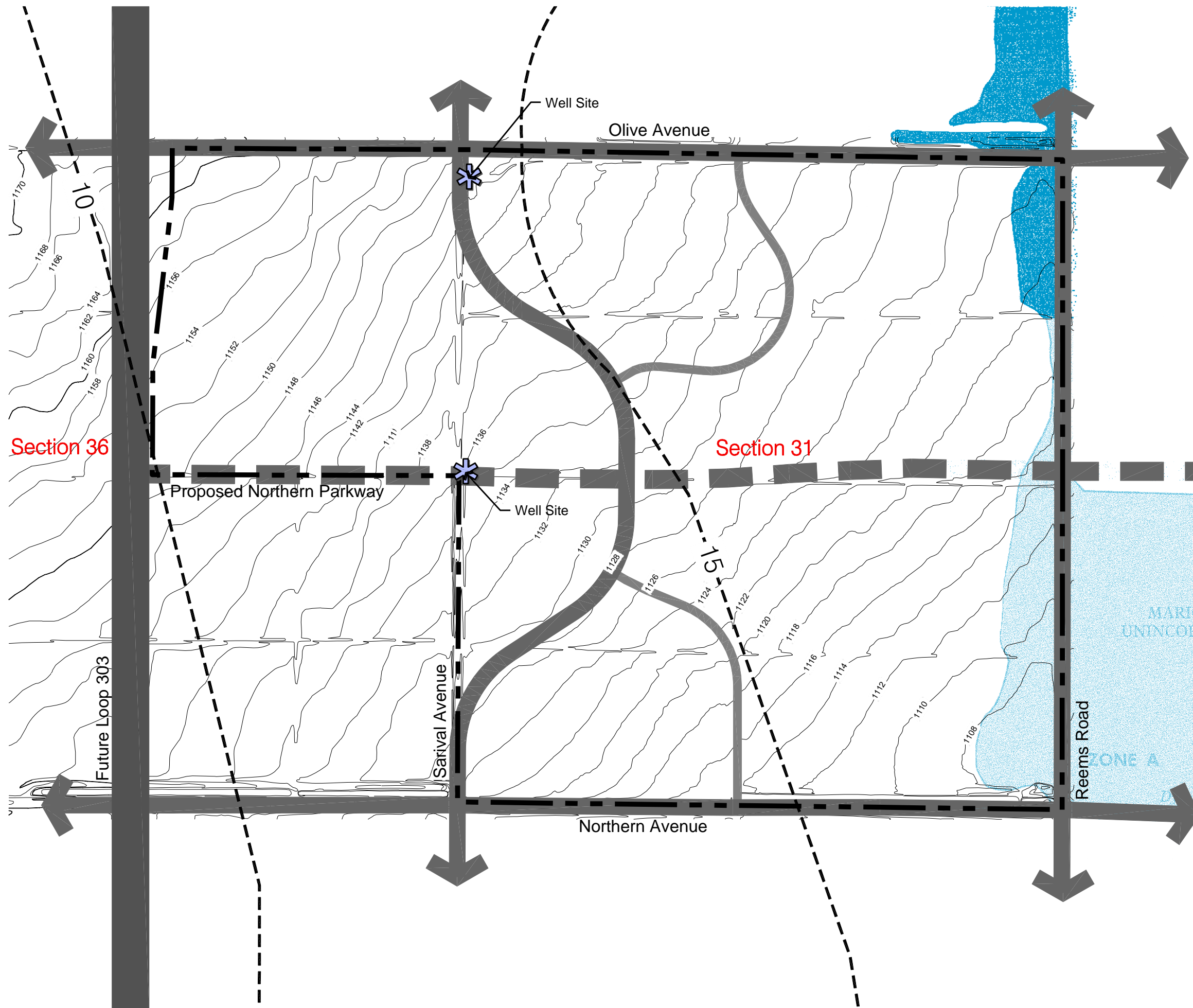
Legend

-  Project Boundary
-  Arterial
-  Collector
-  Proposed Northern Parkway
-  Land Subsidence Contour
-  Flood Plain
-  Existing Irrigation Well

Source:

Land Subsidence:
US Geological Survey Digital Data, 1983.

Topographic Contours:
Flood Control District of Maricopa County,
White Tanks Area Drainage Master Plan
2 Foot Contours.



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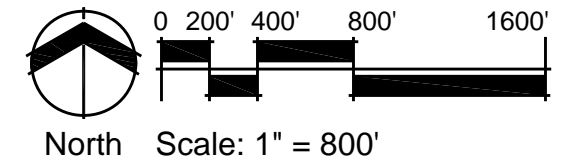


Woolt Crossing

Glendale, Arizona
Planned Area Development

Proposed Land Use

Figure 9



Legend

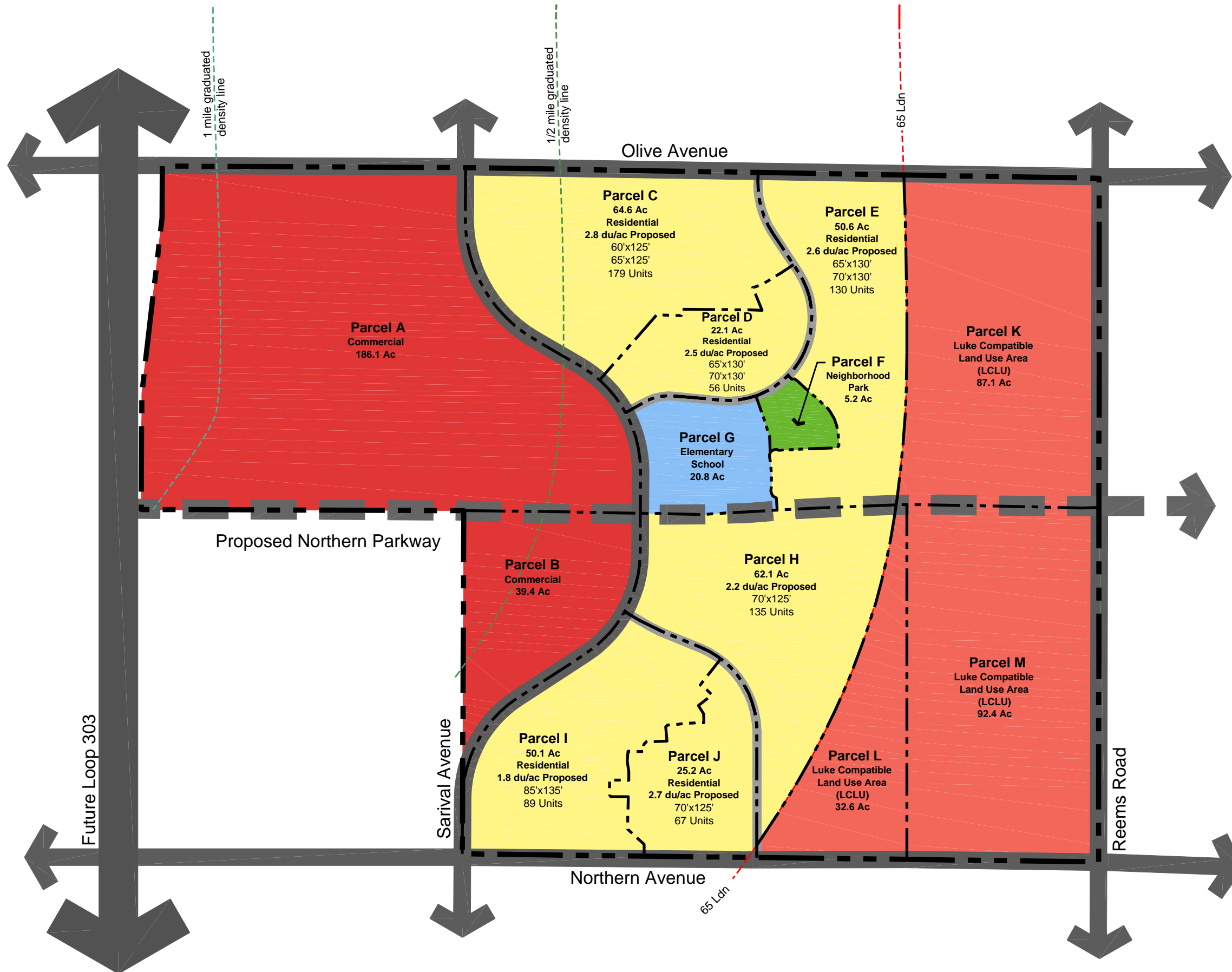
- Project Boundary
- Parcel Boundary

Site Data

Parcel	Gross Ac	Land Use Category	Proposed Units	Proposed Gross Density (du/ac)
A	186.1	Commercial	-	-
B	39.4	Commercial	-	-
C	64.6	Residential	179	2.8
D	22.1	Residential	56	2.5
E	50.6	Residential	130	2.6
F	5.2	Neighborhood Park	-	-
G	20.8	Elementary School	-	-
H	62.1	Residential	135	2.2
I	50.1	Residential	89	1.8
J	25.2	Residential	67	2.7
K	87.1	Luke Compatible Land Use Area (LCLU)	-	-
L	32.6	Luke Compatible Land Use Area (LCLU)	-	-
M	92.4	Luke Compatible Land Use Area (LCLU)	-	-
Totals	738.3		656	0.9

Notes

- Residential densities will not exceed 2 du/ac within the 1/2 mile graduated density line and 4 du/ac within the 1 mile graduated density line.
- There will be no homes within the 65 Ldn line.



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Drawn By: J.Newbegin / S.Posillico



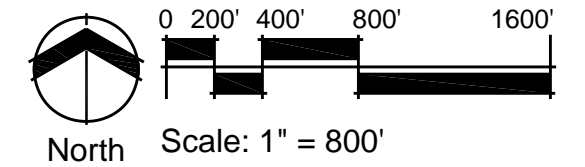
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Woolt Crossing









Glendale, Arizona
Planned Area Development

Phase Map

Figure 10



Legend

-  Phase Boundary
-  Future Loop 303
-  Proposed Northern Parkway
-  Arterial Street
-  Collector Street
-  Phase 1
-  Phase 2
-  Phase 3

Phasing Schedule

Phase	Planned Area Development (PAD) Anticipated Build- Out Date	
	Anticipated Start of Construction	Out Date
1	2010	2010
2	2006	2015
3	2008	2020
	2010	



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Designed By: A. Pangus
Graphics By: N/A

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Woolf Crossing

Glendale, Arizona

Planned Area Development

Conceptual Landscape Master Plan

Figure 11



North

Legend

Preliminary Plant List

Plants to be used in right-of-way of major street zones, natural open space zones, parks, and entry features.

COMMON NAME	BOTANICAL NAME
-------------	----------------

TREES

• SISSOO	DALBERGIA SISSOO
• THORNLESS MESQUITE	PROSOPIS HYBRID
• PURPLE LEAF PLUM	PRUNUS CERASIFERA
• EVERGREEN PEAR	PYRUS KAWAKAMI
• LIVE OAK	QUERCUS VIRGINIANA
• EVERGREEN ELM	ULMUS PARVIFOLIA

SHRUBS/VINES

• TORCH GLOW BOUGAINVILLEA	BOUGAINVILLEA 'TORCH GLOW'
• NATAL PLUM	CARISSA MACROCARPA
• BAJA FAIRY DUSTER	CALLIANDRA CALIFORNICA
• VALENTINE BUSH	EREMOPHILA MACULATA
• GOSSYPIUM HARKENESSII	SAN MARCOS HIBISCUS
• CHIHUAHUAN SAGE	LEUCOPHYLLUM LAEVIGATUM
• CIMMARON DWARF SAGE	LEUCOPHYLLUM ZYGOPHYLLUM
• JAPANESE PRIVET	LIGUSTRUM JAPONICA
• JOJOBA	SIMMONDSIA CHINENSIS
• ORANGE JUBILEE	TECOMA STANS v. ORANGE JUBILEE

SUCCULENTS/ACCENTS

• SMOOTH EDGED AGAVE	AGAVE WEBERI
• TOOTHLESS SOTOL	DASYLIRION LONGISSIMA
• FORTNIGHT LILY	DIETES BICOLOR
• RED YUCCA	HESPERALOE PARVIFLORA
• LILY TURF	LIRIOPE MUSCARI
• BEAR GRASS	NOLINA MICROCARPA

GROUNDCOVERS/PERENNIALS

• DESERT MARIGOLD	BAILEYA MULTIRADIATA
• TRAILING DALEA	DALEA GREGGII
• TRAILING PURPLE LANTANA	LANTANA MONTEVIDENSIS



CMX Project #:
March 2006

Project Manager: D. Burrows
Designed By:
Graphics By:



Drawn By:



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ZON05-20 and PP05-11

Woolf Crossing

Glendale, Arizona
Planned Area Development

Conceptual Trails and Open Space Master Plan

Figure 12



North

Legend

Open Space Programming

Woolf Crossing has been designed to provide ample opportunities for its residents to utilize a variety of outdoor recreational opportunities. The passive and active recreational elements are distributed through a network of linear passage ways, pocket parks, and a neighborhood park. These facilities are conveniently located and interconnected to maximize the usability of the spaces. Parks and open space will be installed with corresponding phases of development.

Neighborhood Park

The neighborhood park will be implemented by the master developer and will include active and passive recreational opportunities such as basketball courts, a soccer field, playgrounds, drinking fountains, seating areas with BBQ opportunities, and open turf areas of different sizes and configurations.

Pocket Parks

Pocket parks are an integral part of the overall community open space system and provide a focal point for the trail system. The pocket parks provide a range of recreational opportunities from passive to active and will be constructed based on the development phasing lines. Pocket parks will be maintained by the homeowners' association, as established by the developer.

 Open Space/Retention

 School

 Trail System (8' wide)

 Trail System (6' wide)

 Pocket Park

 Neighborhood Park

CMX Project #:
March 2006

Project Manager: D. Burrows
Designed By:
Graphics By:



OLSSON ASSOCIATES

Drawn By:



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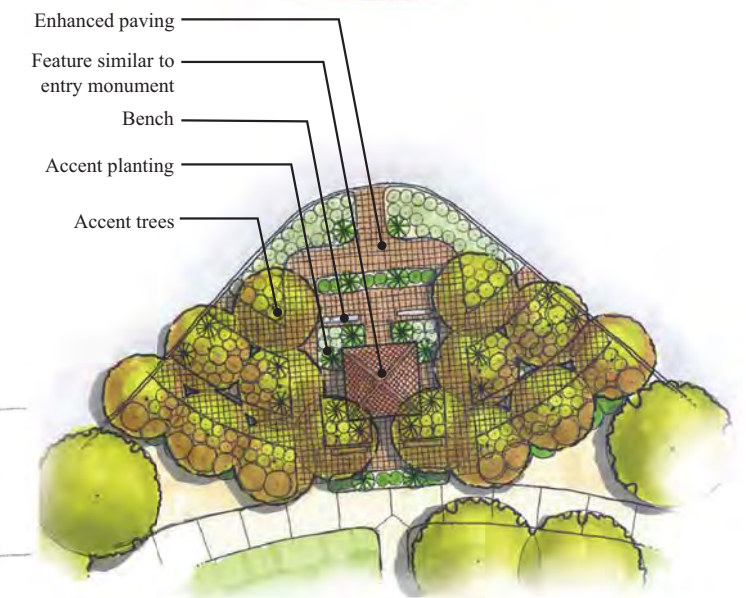
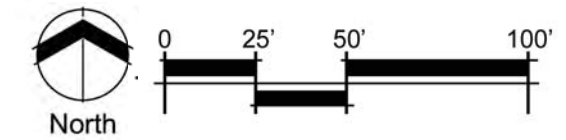
ZON05-20 and PP05-11



Woolf Crossing

Glendale, Arizona
Planned Area Development
Neighborhood Park

Figure 13a



CMX Project #:
March 2006

Project Manager: D. Burrows
Designed By:
Graphics By:



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Drawn By:



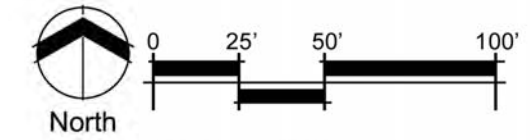
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Woolf Crossing

Glendale, Arizona
Planned Area Development
Pocket Park One

Figure 13b



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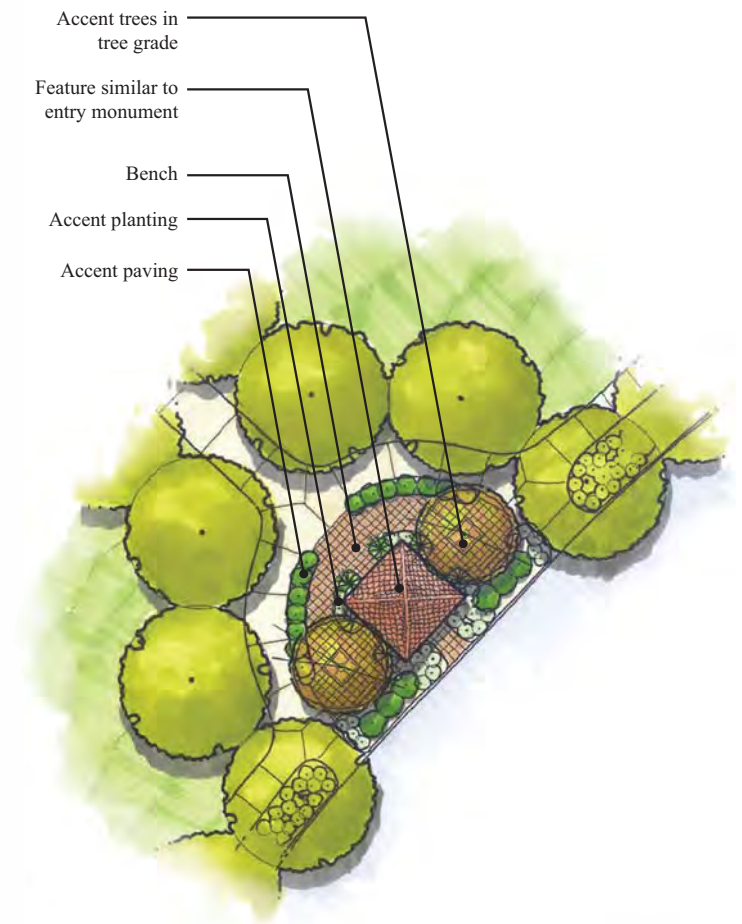
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Wolf Crossing

Glendale, Arizona
Planned Area Development

Pocket Park Two

Figure 13c



CMX Project #:
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Project Manager: D. Burrows
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Graphics By:



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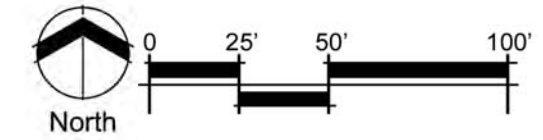
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Woolf Crossing

Glendale, Arizona
Planned Area Development
Pocket Park Three

Figure 13d



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Graphics By:



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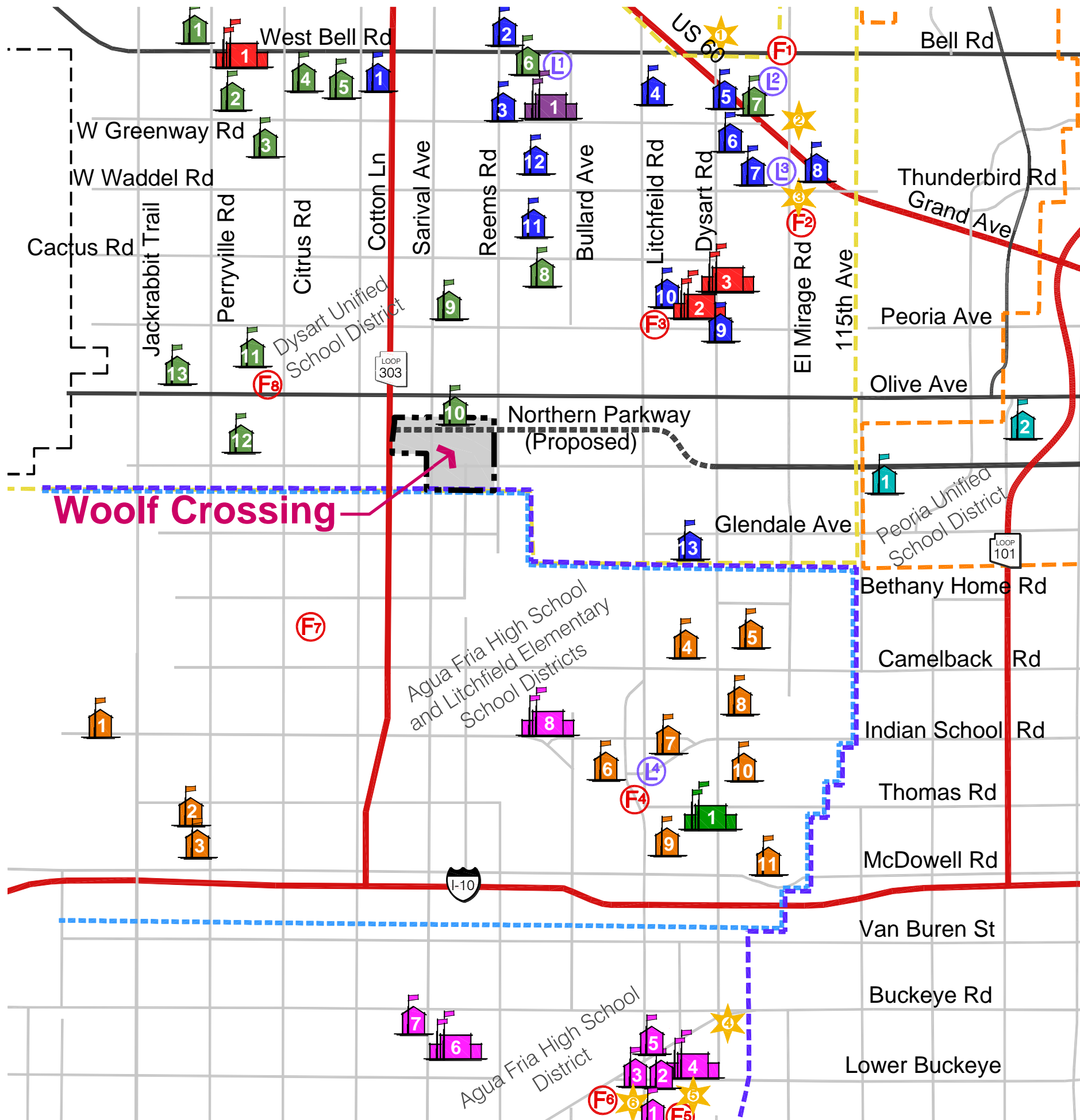
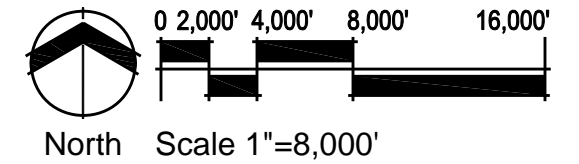
ZON05-20 and PP05-11

Woolf Crossing

Glendale, Arizona
Planned Area Development

Existing and Proposed Community Facilities & Services

Figure 14



- Dysart Unified School District/ Agua Fria School District
- Agua Fria High School District
- Peoria Unified School District
- Litchfield Elementary School District

- | | | |
|--|--------------------------------------|--|
| Dysart Unified School District #89 | | |
| Existing Schools | | |
| 1) Cimarron Springs Elementary | 5) Surprise Elementary | 10) Dysart Preschool |
| 2) Kingswood Elementary | 6) El Mirage Elementary | 11) Marley Park Elementary |
| 3) Countryside Elementary | 7) Dist. Office & Sundown Elementary | 12) Ashton Ranch Elementary |
| 4) West Point Elementary | 8) Thompson Ranch Elementary | 13) Luke Elementary |
| 9) Dysart Elementary | | |
| Proposed Elementary Schools | | |
| 1) Surprise Farms No. 5 Elementary | 6) Orchard Elementary | 11) Cortessa Elementary |
| 2) Surprise Farms No. 4 Elementary | 7) W. Rimrock Street Elementary | 12) White Tank Foothills Elementary |
| 3) Sierra Mountain Elementary | 8) Rancho Gabriela Elementary | 13) Zanjero Trails #2 Elementary |
| 4) Surprise Farms No. 2 Elementary | 9) Greer Ranch Elementary | |
| 5) Surprise Farms No. 3 Elementary | 10) Woolf Property Elementary | |
| Existing High Schools | | |
| 1) Sundown High School | | |
| 2) Willow Canyon High School | | |
| 3) Dysart High School | | |
| Proposed High Schools | | |
| 1) Proposed High School #1 | | |
| Dysart Unified School District | | |
| Proposed Elementary Schools | | |
| 1) Surprise Farms No. 5 Elementary | 6) Orchard Elementary | 11) Cortessa Elementary |
| 2) Surprise Farms No. 4 Elementary | 7) W. Rimrock Street Elementary | 12) White Tank Foothills Elementary |
| 3) Sierra Mountain Elementary | 8) Rancho Gabriela Elementary | 13) Zanjero Trails #2 Elementary |
| 4) Surprise Farms No. 2 Elementary | 9) Greer Ranch Elementary | |
| 5) Surprise Farms No. 3 Elementary | 10) Woolf Property Elementary | |
| Litchfield Elementary School District #79 | | |
| 1) Verrado Middle School | 5) Barbara B. Robey Elementary | 9) Palm Valley Elementary |
| 2) Scott Libby Elementary | 6) Western Sky Middle School | 10) Corte Sierra Elementary |
| 3) White Tank Learning Center | 7) Litchfield Elementary | 11) Rancho Santa Fe Elementary |
| 4) Dreaming Summit Elementary | 8) Wigwam Creek Middle School | |
| Aqua Fria Union High School District #216 | | |
| Higher Education | | |
| 1) Avondale Middle School | 5) Avondale Elementary | 1) Estrella Mountain Community College |
| 2) Lattie Coors Elementary | 6) Desert Edge High School | |
| 3) Pioneer Elementary | 7) Wildflower Ranch Elementary | |
| 4) Agua Fria High School | 8) Millennium High School | |
| Peoria Unified School District #11 | | |
| 1) Country Meadows Elementary | 2) Sun Valley Elementary | |
| Fire Station Locations | | |
| 1) Surprise Station 301 | | |
| 2) El Mirage Station 1 | | |
| 3) City of Glendale Station 833 | | |
| 4) City of Glendale Station 837 | | |
| 5) City of Avondale Station 171 | | |
| 6) City of Goodyear | | |
| 7) Future Rural / Metro Fire Station | | |
| 8) Proposed Cortessa Fire Station | | |
| Police Stations | | |
| 1) Sun City/Sun City West Police | | |
| 2) Surprise Police | | |
| 3) El Mirage Police | | |
| 4) Wickenburg Office | | |
| 5) Avondale Police | | |
| 6) Goodyear Police | | |
| Libraries | | |
| 1) Northwest Regional | | |
| 2) Hollyhock Library | | |
| 3) West El Mirage Library | | |
| 4) Litchfield Park Branch | | |

CMX Project #: 7074.01

March 2006

Project Manager: D. Burrows

Designed By: A. Pangus

Graphics By: N/A

Drawn By: J.Newbegin / S.Posillico

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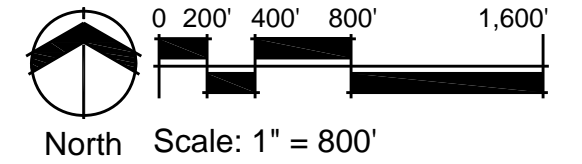


Woolt Crossing

Glendale, Arizona
Planned Area Development

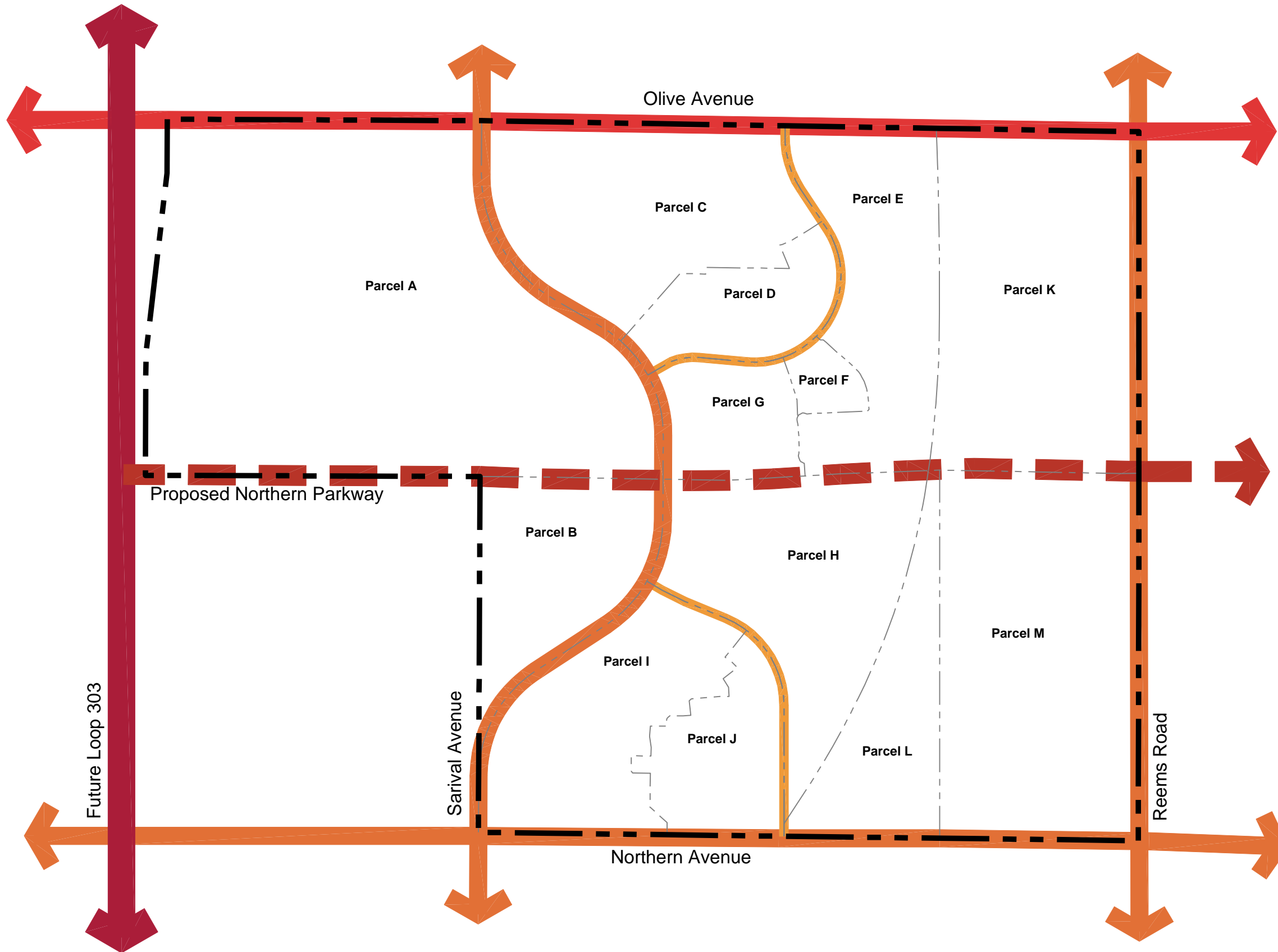
Street Circulation Plan

Figure 15



Legend

	Project Boundary
	Parcel Boundary
	Freeway
	Proposed Northern Parkway
	Major Arterial
	Minor Arterial
	Minor Collector



Source:
Maricopa County Streets Atlas,
4-18-2001
Traffic Impact Study,
Civtec June, 2005

CMX Project #: 7074.01
March 2006
Project Manager: D. Burrows
Designed By: A. Pangus
Graphics By: N/A

Drawn By: J.Newbegin / S.Posillico

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Woolf Crossing

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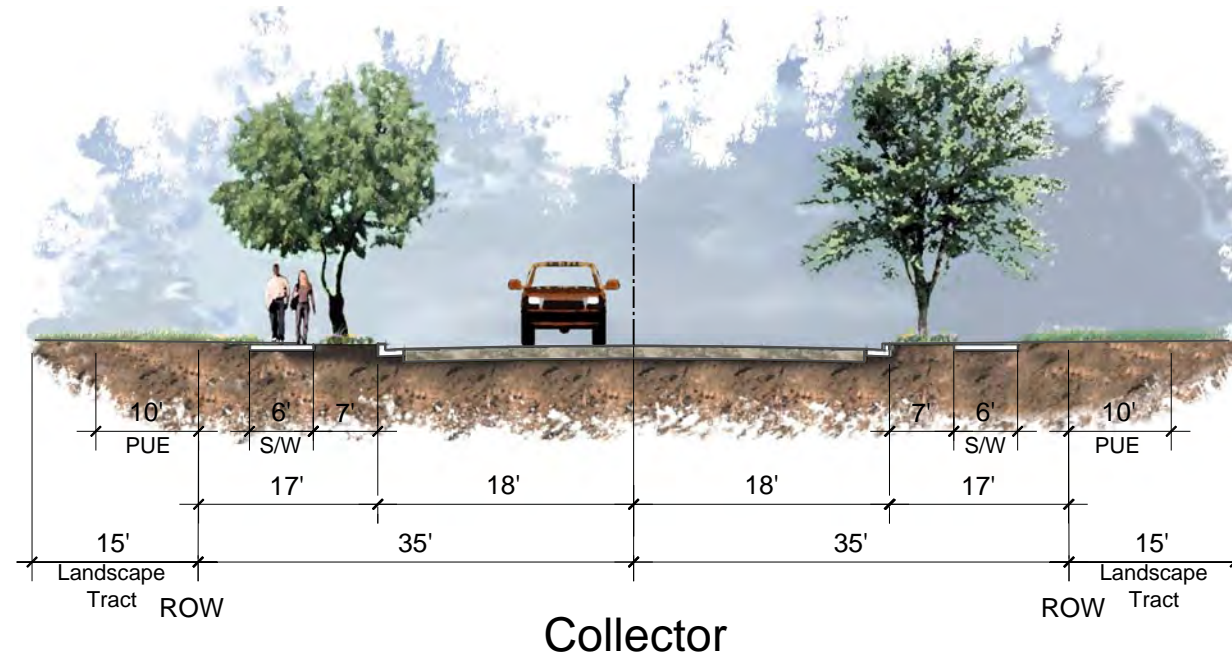
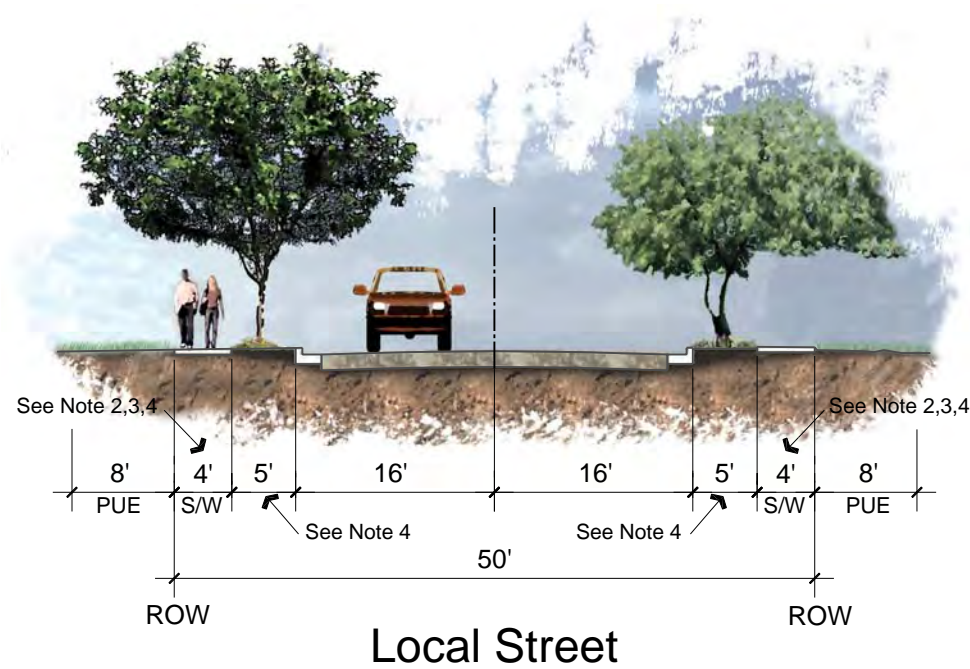
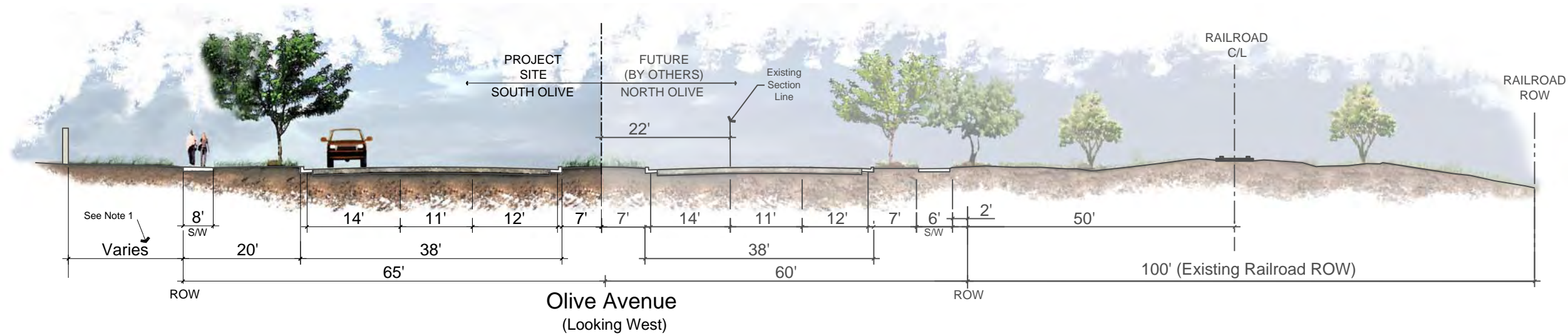
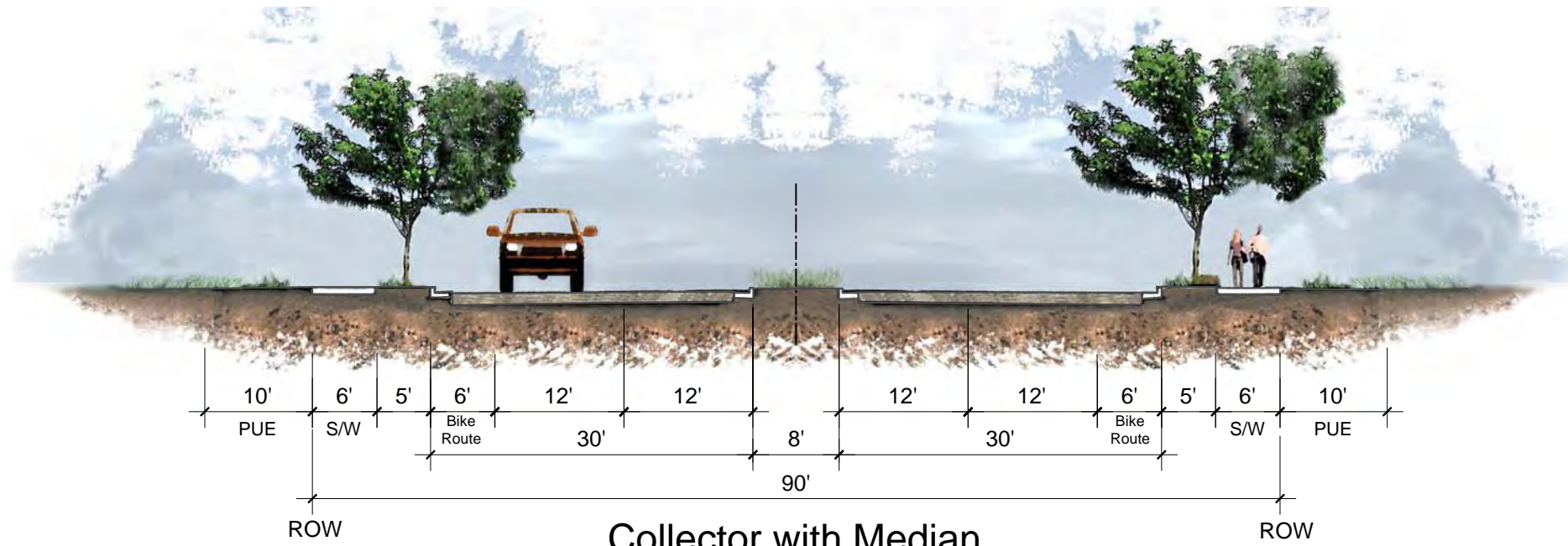
Typical Street Cross-Sections

N.T.S.

Figure 16A

Notes

1. Minimum 30' Landscape Tract.
2. No sidewalk required on South side of Seldon Lane where adjacent to the proposed Northern Parkway
3. Sidewalk may be attached to curb at knuckles and cul de sac.
4. Reduce landscape width to 3' and increase sidewalk width to be 6' where adjacent to school or park.



Source

Refer to Traffic impact Study by CivTech dated February 2006.

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March 2006
Project Manager: D. Burrows
Designed By: A. Pangus
Graphics By: N/A

Drawn By: J.Newbegin / S.Posillico

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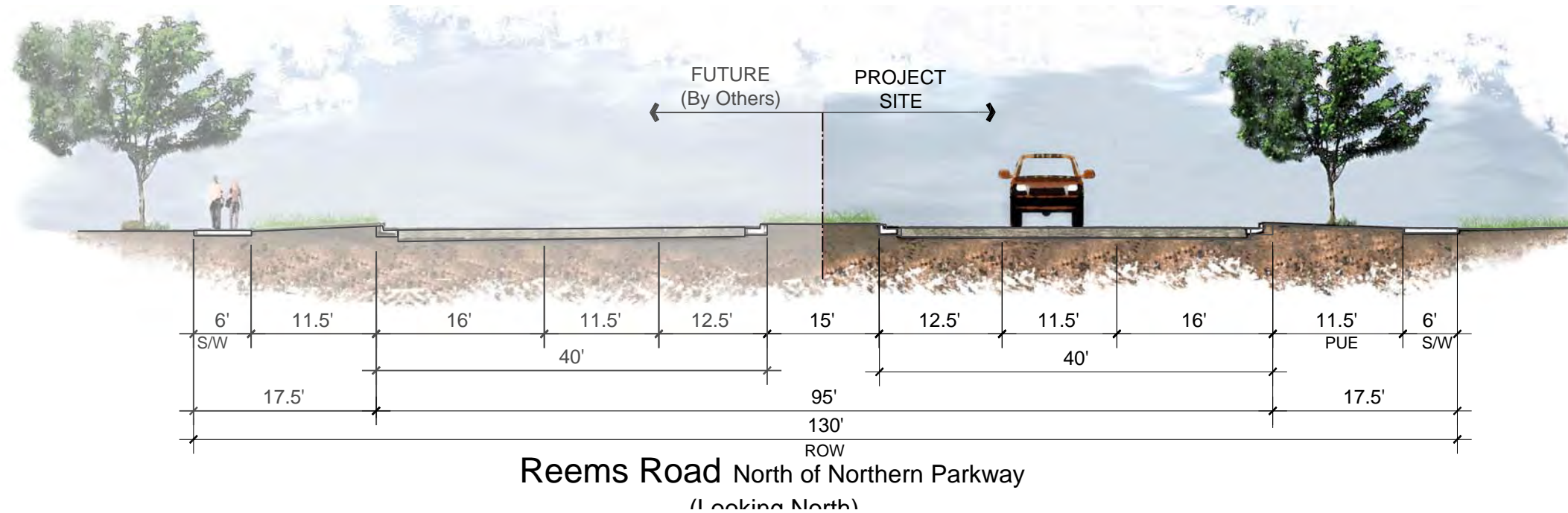
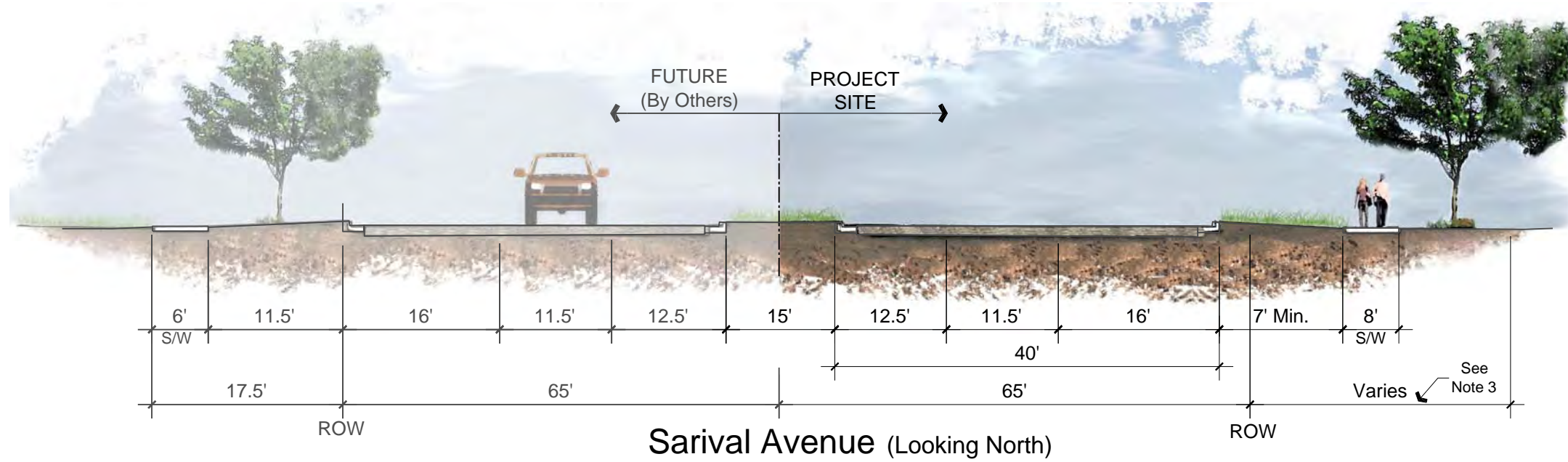
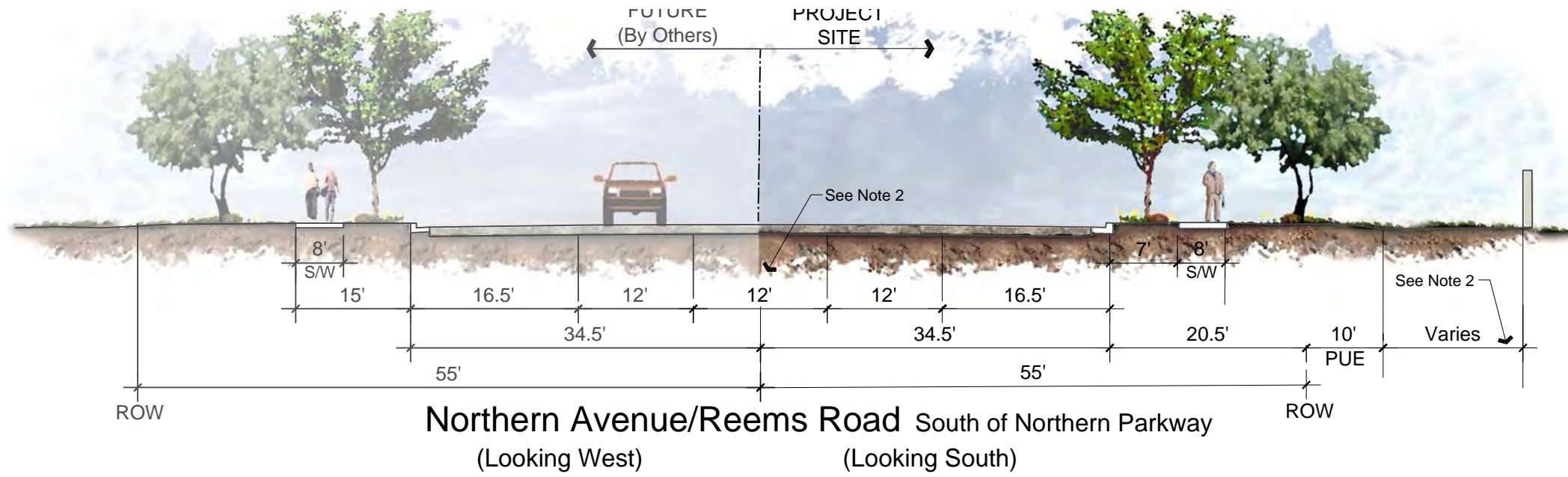
Woolf Crossing

Glendale, Arizona
Planned Area Development

Typical Street Cross-Sections

Notes N.T.S. Figure 16B

1. Center Turn Lane: 12 feet median is optional.
2. Minimum 40' Landscape Tract
3. Minimum 30' Landscape Tract.



Source

City of Glendale Design and Construction Standards

Refer to Traffic Impact Study by CivTech dated February 2006.

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March 2006
Project Manager: D. Burrows
Designed By: A. Pangus
Graphics By: N/A

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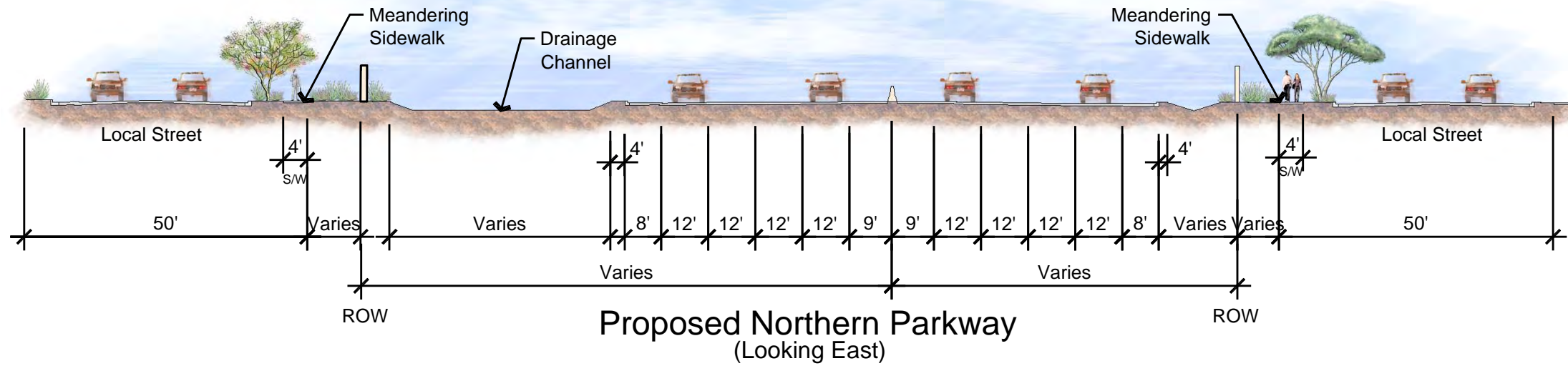
Woolt Crossing

Glendale, Arizona
Planned Area Development

Typical Street Cross-Sections

N.T.S.

Figure 16C



Sources

Design Concept Report for Northern Parkway,
URS 2003

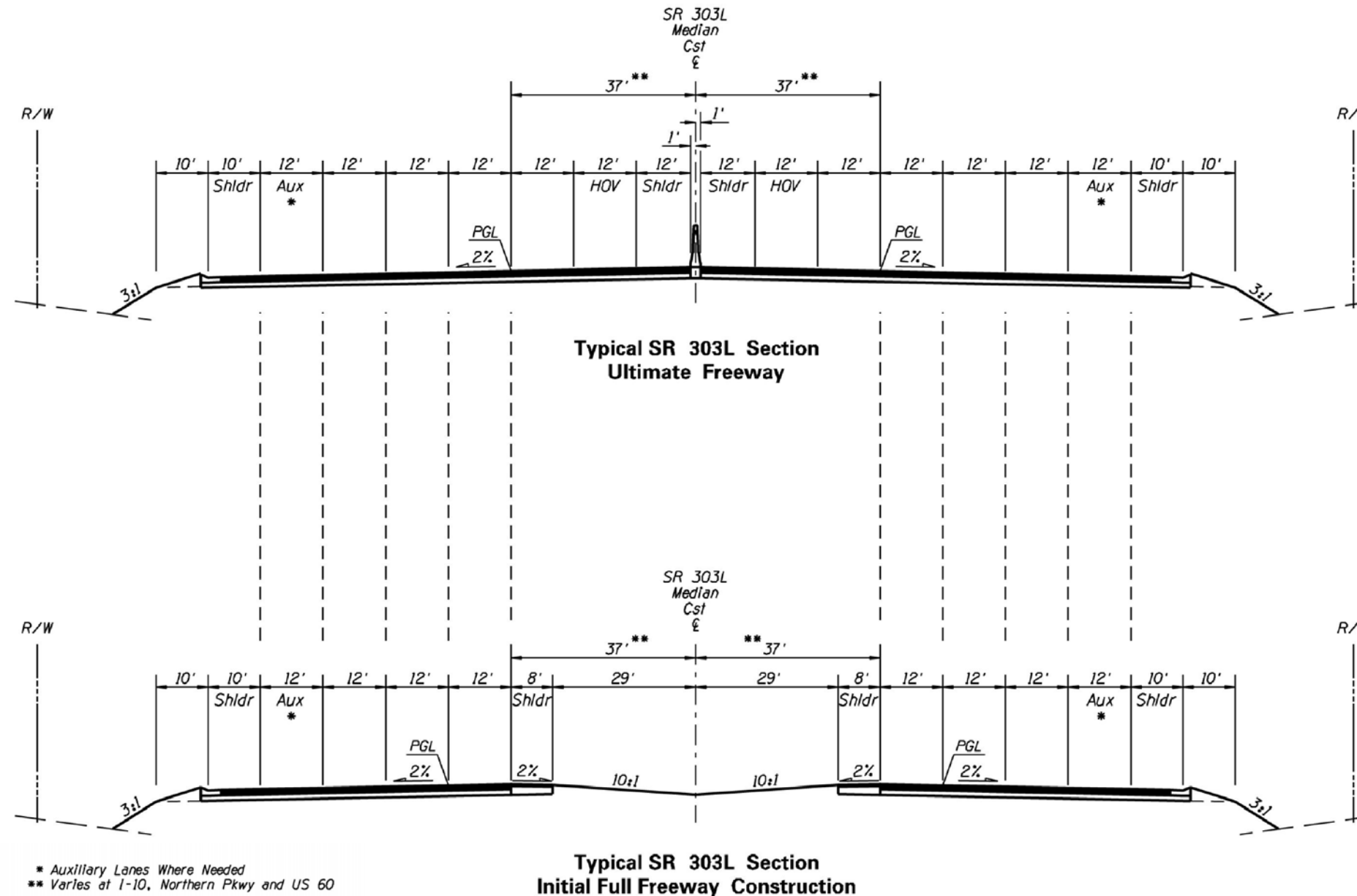
City of Glendale Design and Construction Standards

Note

SR303 Cross-sections taken from

URS Initial Design Concept Report
SR 303L, I-10 to US 60
Maricopa County Department of Transportation

Dated December 2005



* Auxiliary Lanes Where Needed
** Varies at I-10, Northern Pkwy and US 60

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Graphics By: N/A

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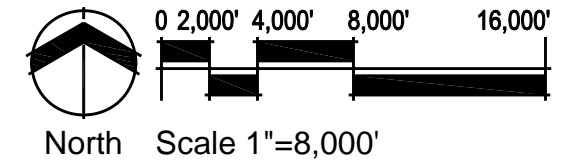


Woolt Crossing

Glendale, Arizona
Planned Area Development

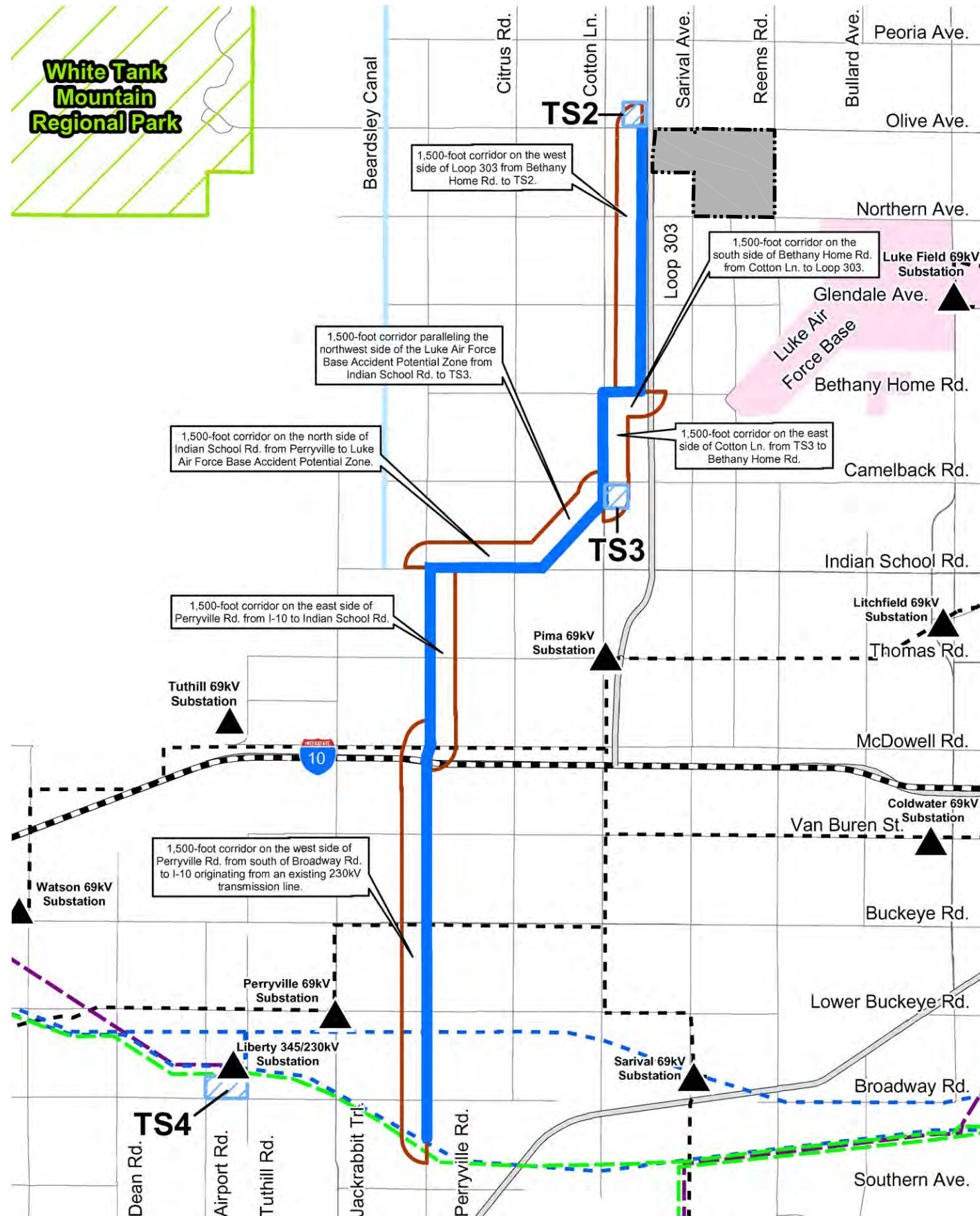
APS Map West Valley South

Figure 17



Legend

- Project Boundary
- Proposed 230kV Substation
- 1,500-foot Corridor
- Existing Substation
- Proposed 230kV System Option
- Existing 500kV Transmission Line
- Existing 345kV Transmission Line
- Existing 230kV Transmission Line
- Existing 69kV Transmission Line



Source

System Option Approved
by Siting Committee



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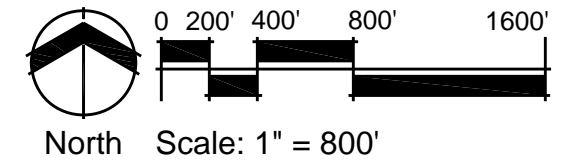


Woolt Crossing

Glendale, Arizona
Planned Area Development

On-Site Sewer Plan

Figure 18



Legend

- Project Boundary
- Parcel Boundary
- Luke AFB Ldn Noise Contour Line
- Proposed 8" Sewer Collection Line
- Proposed 12" Sewer Collection Line
- Proposed 18" Sewer Collection Line
- Proposed 21" Sewer Collection Line
- Proposed 24" Sewer Collection Line
- Proposed Manhole

Notes

1. All lotting is conceptual only and subject to future revision.



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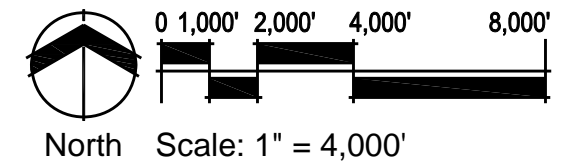


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Glendale, Arizona
Planned Area Development

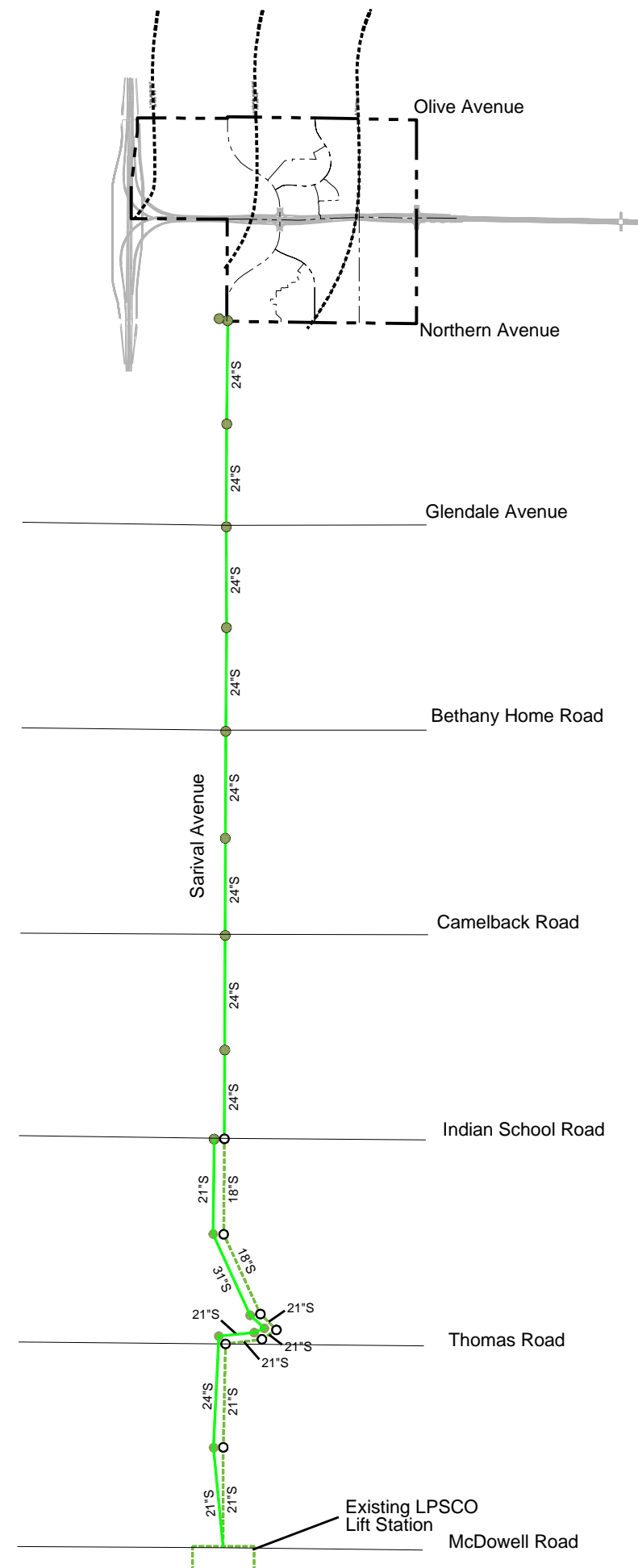
Off-site Sewer Plan

Figure 19



Legend

- Project Boundary
- Parcel Boundary
- Luke AFB Ldn Noise Contour Line
- Existing Sewer
- Proposed Sewer
- Existing Manhole
- Proposed Manhole



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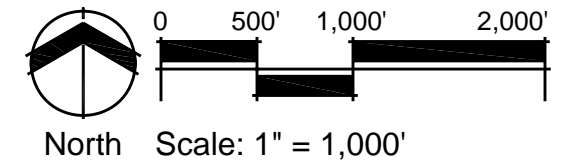


Woolt Crossing

Glendale, Arizona
Planned Area Development

Water Plan

Figure 20



Legend

- Project Boundary
- Parcel Boundary
- Luke AFB Ldn Noise Contour Line
- Zone Line

Proposed Onsite Distribution Line:

- 8"
- 12"
- 16"
- 20"
- 24"

Proposed Offsite Distribution Line:

- 12"
- 16"

- Proposed Well Location
- Proposed Pump Location
- Proposed Reservoir Location

Proposed Transmission Line

- 12"
- 20"

Notes:

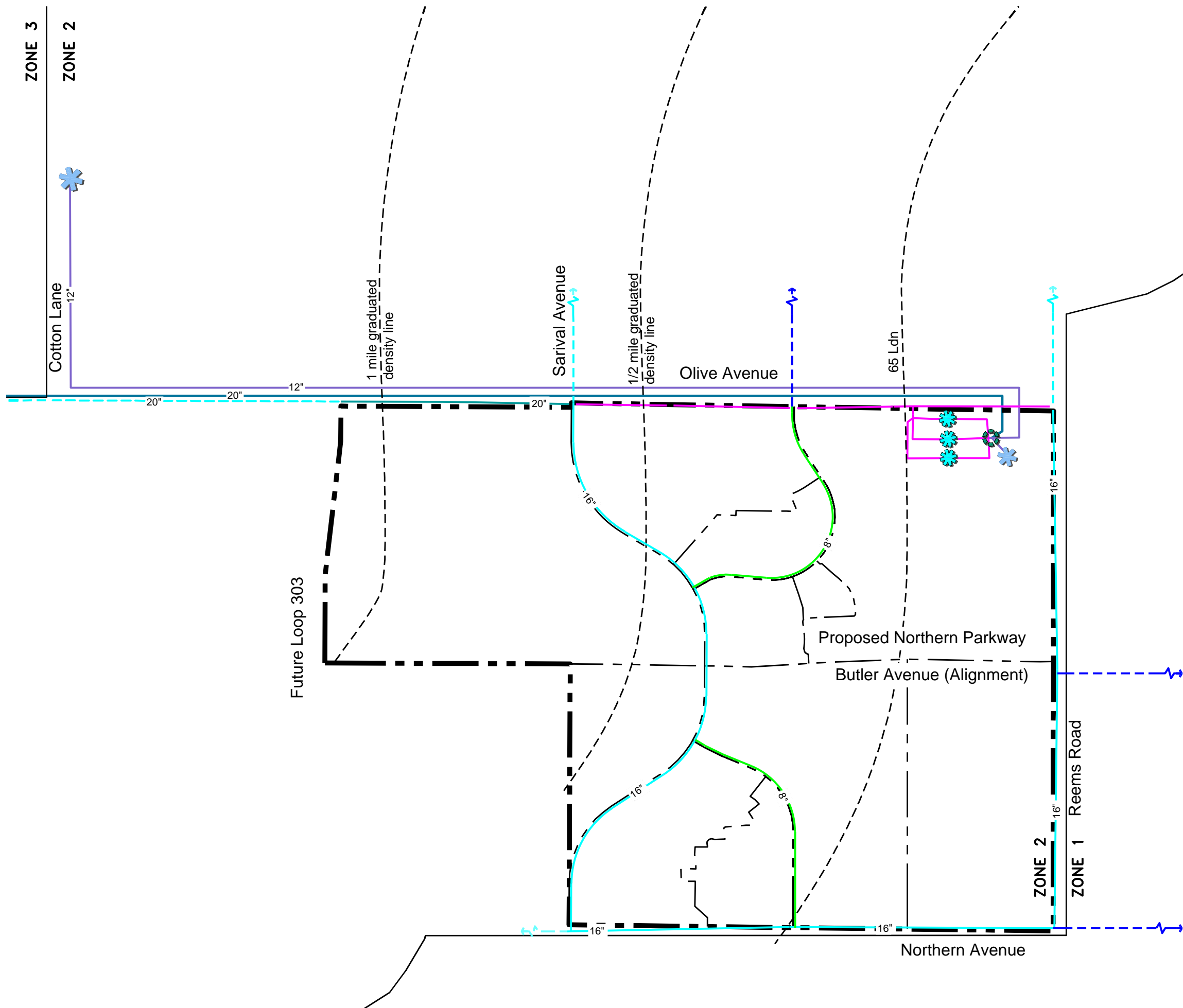
1. All lotting is conceptual only and subject to future revision.
2. Refer to Master Water Study for more information.

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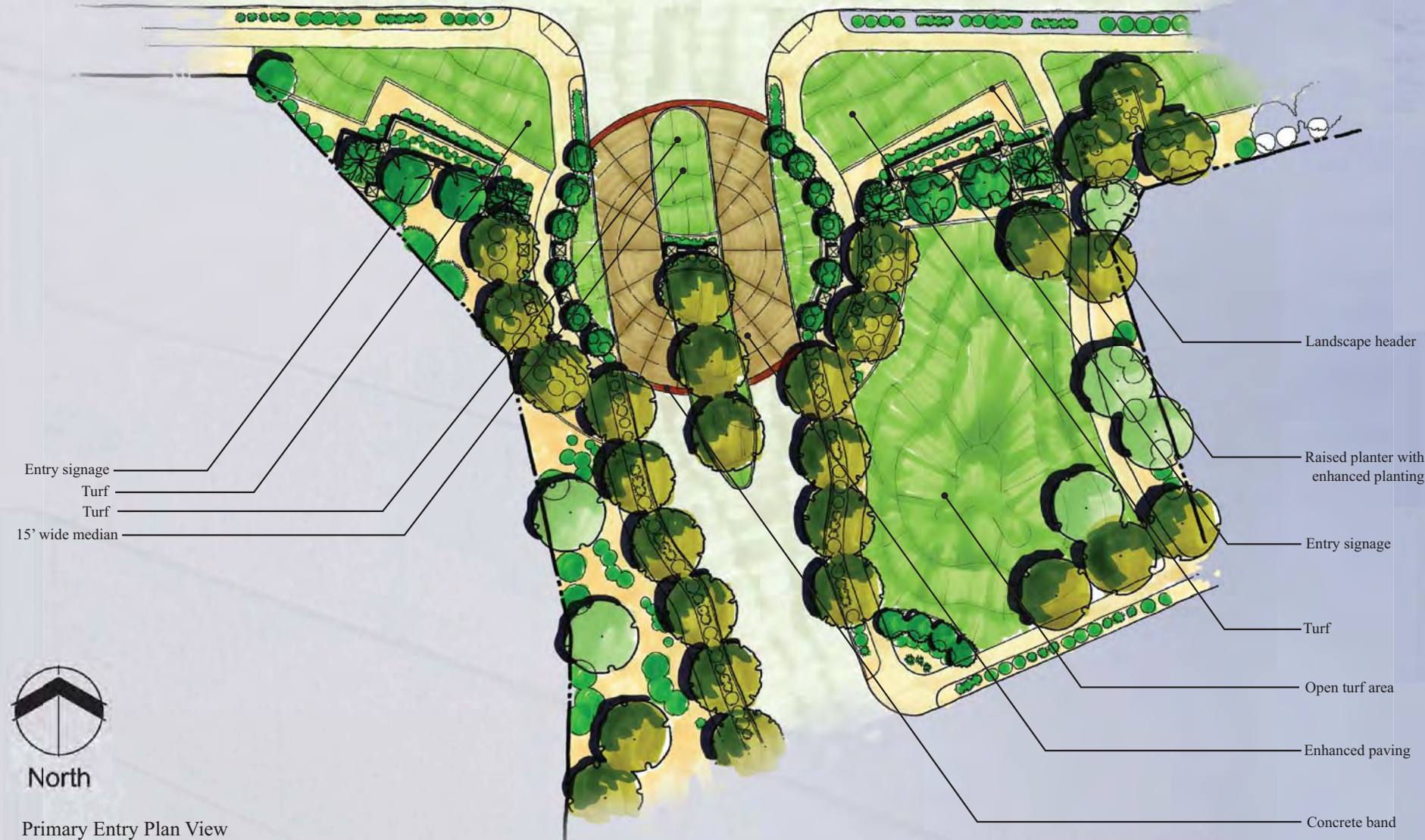


Woolf Crossing

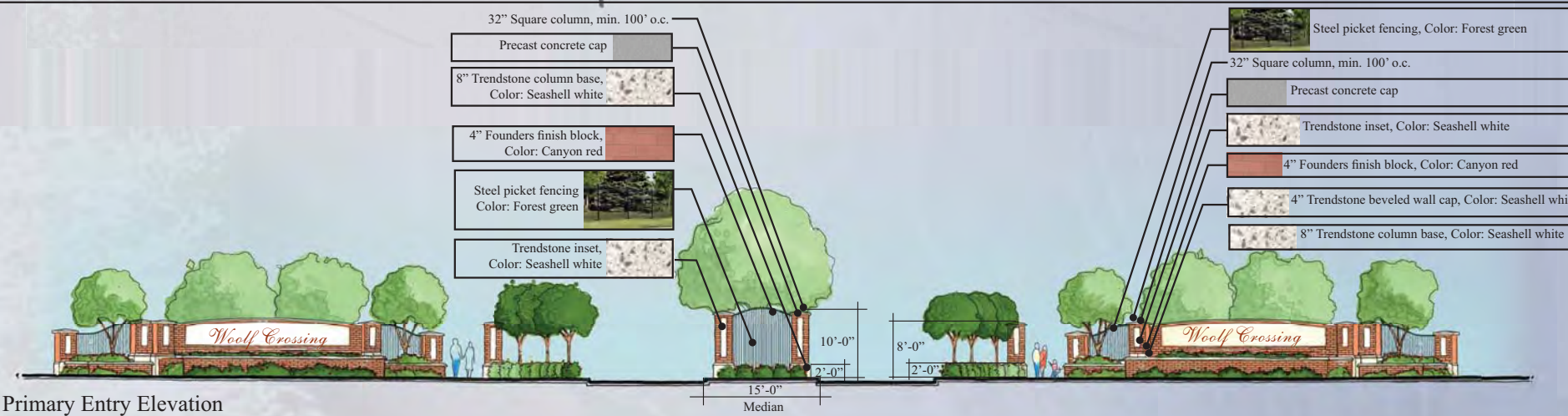
Glendale, Arizona
Planned Area Development

Entry

Figure 21



Primary Entry Plan View



Primary Entry Elevation

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Graphics By:



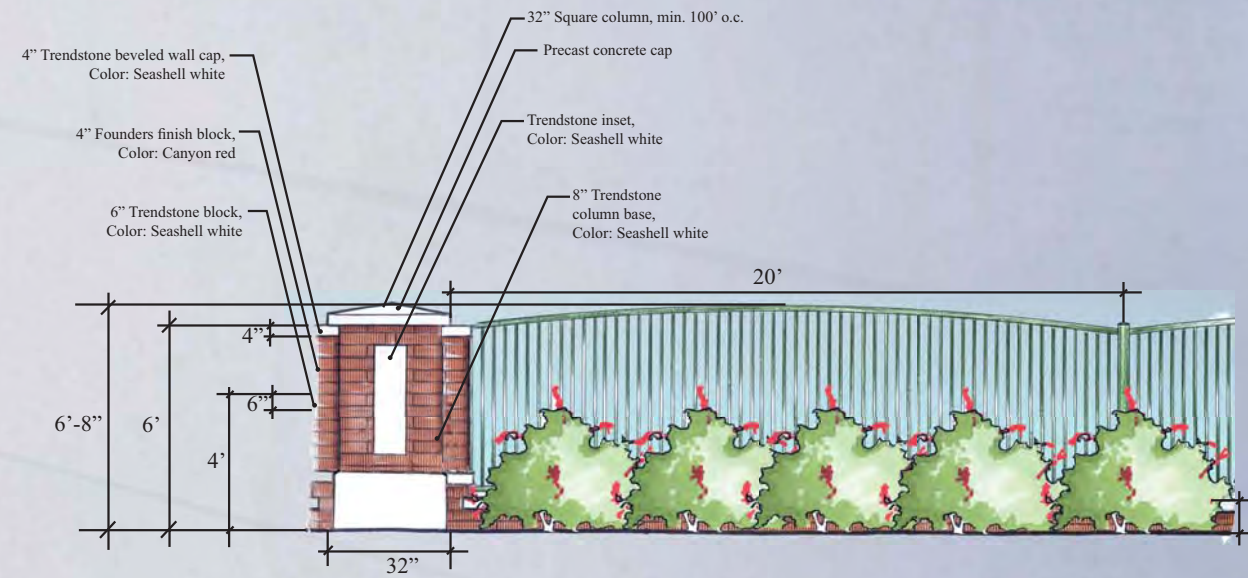
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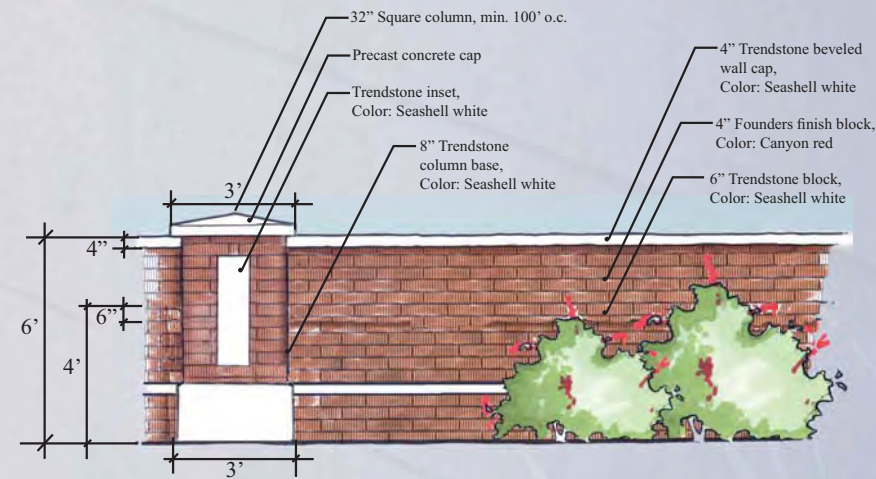
Glendale, Arizona
Planned Area Development

Wall Elevations

Figure 22



View Wall Elevation



6' Theme Wall Elevation

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Glendale, Arizona
Planned Area Development

Theme Wall and View Wall Locations

Figure 23



North

Legend

--- View Wall

— Theme Wall

Note:

- 1.) Walls visible from Right-of-Way and public spaces will have enhanced decorative surfaces.
- 2.) Retaining walls and return walls on corner lots will either be of enhanced decorative surface or painted and stuccoed to match the neighborhood.

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Project Manager: D. Burrows
Designed By:
Graphics By:


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Drawn By:



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Woolf Crossing

Glendale, Arizona
Planned Area Development

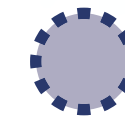
Entry Monumentation Location Exhibit

Figure 24



North

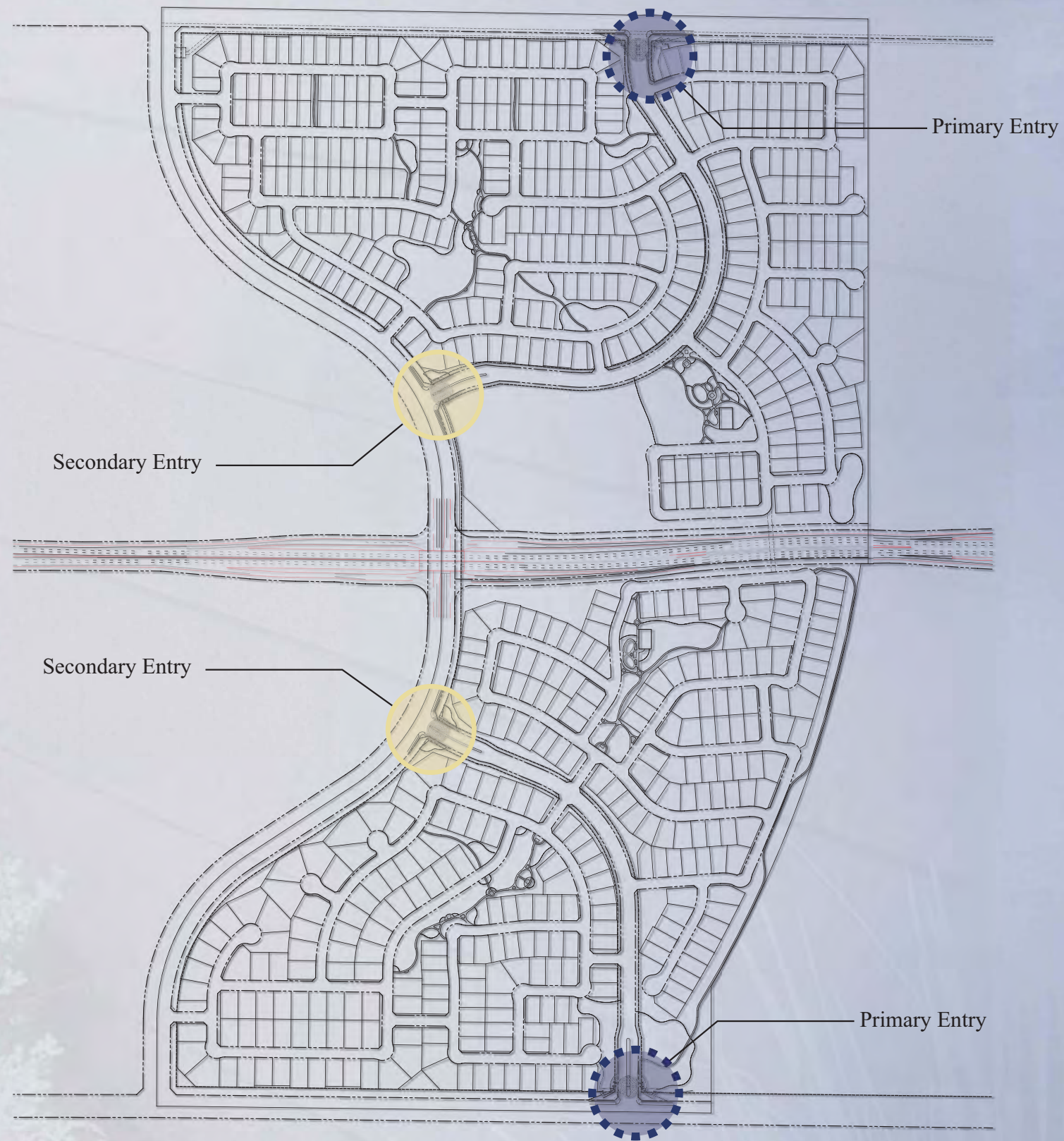
Legend



Primary Entry



Secondary Entry



CMX Project #:
March 2006

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Designed By:
Graphics By:



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APPENDIX A

LETTER FROM LUKE AIR FORCE BASE



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

7 March 2006

Mr. James R. Mitchell
Director, Community Initiatives Team
56th Fighter Wing
14185 West Falcon Street
Luke AFB AZ 85309-1629

Mr. Jon Froke
5850 W Glendale Ave.
Glendale AZ 85301

Re: Case #ZON 05-20 Woolf Crossing

Dear Mr. Froke

Thank you for the opportunity to provide comments on the proposed amendment on the Zone Change and Development Master Plan Application for Woolf Crossing. The original Woolf Crossing, as outlined in the January 27, 2005 letter, was located on 738.3 gross acres generally bounded by Loop 303, Northern Avenue, Reems Road and Olive Avenue. The proposed amendment now specifies the location as being on 290.5 gross acres in the same area. The original proposal was to rezone from Rural-43 to DMP and to construct 1,363 residential dwelling units (du), commercial/office buildings, industrial/employment, open space, parks and an elementary school. The updated plan is to change 1,363 to 656 du, while maintaining commercial/office buildings, industrial/employment, open space, parks and an elementary school. The gross residential density has been altered to reflect the change from 1.85 du/acre to 1.9 du/acre. Woolf Crossing is located inside and outside the 1988 JLUS 65 Ldn, "high noise or accident potential zone" as identified by A.R.S. § 28-8461 and is within the "territory in the vicinity of a military airport" also defined by A.R.S. § 28-8461. The industrial/employment portion is inside the 65 Ldn, while the residential is graduated away from the 65 Ldn as follows: from the 65 Ldn to 1/2 mile, 1.87 du/acre and from 1/2 mile to 1 mile, 3.65 du/acre.

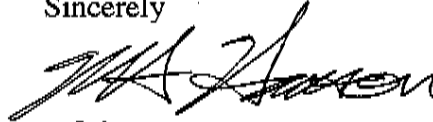
Luke AFB follows the guidelines in the Graduated Density Concept (GDC). The GDC proposes, in the absence of a more restrictive state, county or municipal general or comprehensive plan, graduating densities away from the 65 Ldn as follows: a maximum of 2 du/acre from the 65 Ldn to 1/2 mile, a maximum of 4 du/acre from 1/2 mile to 1 mile and a maximum of 6 du/acre from 1 to 3 miles. Woolf Crossing, with densities of 1.87 and 3.65 du/acre, falls within these guidelines.

Since Woolf Crossing will be located within the "territory in the vicinity of a military airport," it will be subjected to high noise and approximately 170 over flights per day. We recommend you review the sound attenuation requirements found in A.R.S. § 28-8482. We encourage an aggressive notification program on the part of the applicant and/or developer to

inform potential residents about Luke AFB operations. A sample notification letter can be found on the Luke AFB web site at www.luke.af.mil/urbandevelopment. We strongly encourage use of this letter.

If you have any questions, please contact my Community Planner, Mr. Bob Dubsy, at (623) 856-6195.

Sincerely

A handwritten signature in black ink, appearing to read "J. Mitchell".

For

JAMES R. MITCHELL

cc:

Mr. Gary Norris, Planner, Maricopa County Planning and Development Department
Colonel David L. Orr, Vice Commander, 56th Fighter Wing

APPENDIX B

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Lot Layout

1. *The minimum lot width and depth are to conform to the applicable Zoning District.*
Minimum lot width and depth will conform to the approved PAD standards. In many cases, the minimum lot depth exceeds the minimum zoning requirement of 100-feet.
2. *Corner lots are to be at least five feet wider than the minimum lot width required by the Zoning Ordinance with a minimum 6-foot wide landscape tract.*
An eight (8) foot landscape tract will be provided adjacent to the street side of a corner lot, as opposed to increasing the minimum lot width. By providing the tract, the additional open space and landscape opportunities, as well as increased sight visibility for pedestrians and vehicular traffic result in an overall higher quality of life for residents of the community. In the event that providing a tract is not feasible or practical, the lot width will be increased above the minimum lot width by at least eight (8) feet .
3. *Some variation in lot size is expected due to wider corner lots, cul-de-sac lots, and buffer lots.*
There will be some variation in lot width due to wider corner lots and cul-de-sacs.
4. *Vary the width of lots that are side by side by five (5) feet or more.*
The intent of this guideline is to provide for diverse streetscape through variation of lot widths. The portion of Woolf Crossing north of the Northern Parkway has been designed to include varying lot widths because this area of the PAD contains the development parcels with the smaller lots. These varying lot widths will not be on each side by side lot, but scattered through the subdivision. In addition to varying lot widths, the intent of the guideline has been satisfied through the introduction of varying house product design with unique architectural elevations to help create an enhanced streetscape, enhanced open space linkages, curvilinear streets, cul-de-sacs and knuckles, which also provide significant lot variation.
5. *Stagger the front yard setback to living area and garage by a minimum of 3 feet or more on adjoining lots and provide a range of 6 feet or more on the same block.*
Front yards will be staggered by a minimum of 3 feet between adjacent lots, with a range of six (6) feet or more provided on the same block.
6. *Locate the main garage a minimum of 5 feet back from the living area and a third or fourth car garage a minimum of 3 feet recessed from the main garage. Different garage orientations and depths are encouraged to prevent a garage dominant street appearance.*
The home product will include varying garage orientations and depths to avoid a garage dominant streetscape through the use of side entry garages and recessed main garage designs on many of the home designs. In no neighborhood will more than 50% of the model designs available include a front facing garage in front of the living space. However, the actual mix of homes at build out with side entry and front facing garages will be dependent upon sales.
7. *Stagger the rear yard setbacks when a row of lots backs onto an arterial or collector street. 1. Stagger setbacks by 3 feet or more on adjoining lots and provide a range of*

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6 feet or more on the same block. 2. Vary depths of the perimeter lots, which are visually significant to provide for variation in perimeter wall alignments.

In addition to the large perimeter landscape buffers along the collector and arterial streets, the subdivision has been designed with varying depths for the perimeter lots to provide variation in perimeter wall alignments backing to arterial and collector streets. Rear yard setback staggers will not be specifically defined, but the home design provides for rear yard staggers through the use of varying product depth.

- 8. Provide a minimum of 20' from the property line to the face of the garage when a detached sidewalk is required.*

A minimum of a 20 foot setback will be provided from the face of the garage to the sidewalk.

- 9. Provide variation in the width of the side yards and in the separation between houses on the lots. Increase the sideyard width on some lots to provide a minimum of twenty feet combined side yards. 1. Group wider side yards together on some adjoining lots to provide a separation of twenty feet or more between houses. 2. Provide a minimum of 15-ft. side yards for two story houses. 3. Provide a minimum 30 -ft. rear yard setback for all two-story houses including those with integral patios. A covered patio and balcony may extend into this setback up to 10 feet.*

Minimum side yard requirements of 5' and 10' are required through the approved PAD standards. The ultimate location of side yards should result in some instances of minimum twenty foot combined side yards. The home design and garage orientations provide sufficient variation to accomplish the intent of the guidelines without requiring additional side and rear yard standards for two-story homes.

- 10. Lots backing onto collector streets must be a minimum of 10 feet deeper than the minimum depth required by the Zoning Ordinance.*

The minimum lot depths in the different parcels range from 125' to 135', which is 25 to 35 feet deeper than the minimum lot depth in the Glendale Zoning Ordinance for the comparable zoning category and provides sufficient lot depth to buffer the homes. Additionally, the collector streets have been designed with landscaped buffers to provide further separation between the homes and the collector streets without requiring additional lot depth along the collector streets.

- 11. Avoid siding lots onto arterial streets unless an additional 20' landscape tract is provided. In addition to the 30' landscape tract required along arterial streets.*

The subdivisions will be designed to avoid siding lots onto arterial streets.

- 12. Lots backing onto arterial streets and more intense and potentially incompatible land uses must be at least 20 feet deeper than the interior lots.*

As stated above, the minimum lot depths in Woolf Crossing are significantly deeper than the Glendale Zoning Ordinance minimum and provide sufficient depth to create a buffer. Furthermore, the buffers provided along arterial streets provide enhanced separation between the homes and the arterial streets.

- 13. Design the subdivision so that no more than six lots are placed in a row backing onto an arterial or collector street before there is a change in the lot pattern or streetscape.*

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The subdivision has been designed with varying landscape buffer depths along the arterial and collector streets. Additionally, the design of Sarival and the collector streets in a curvilinear fashion to provide a significant change in the lot pattern and streetscape. This design provides sufficient variation without limiting the number of lots in a row.

14. *Provide mix of driveway orientations to include angled, circular, or side entry so that no more than 75% of the drives are straight.*

The housing product will contain a mix of driveway orientations, including side entry garages, recessed front facing garages and standard garage entries. While the actual percentage of lots with straight drives will be dependent on sales, the proposed product mix will result in no more than 75% of the lots with straight drives.

15. *Locate lots adjacent to or backing up to open space areas*

The subdivision has been designed to integrate the open space areas with the development, with lots backing up to or adjacent to open spaces.

16. *Provide a transition in lot sizes adjacent to existing development where lots are larger than 12,000 square feet. New lots abutting the existing lots must have a minimum lot area that is at least 80% of the average area of the existing lots.*

This project is bounded by a proposed freeway and arterial streets. There are no adjacent lots that are larger than 12,000 square feet. The only larger lots are on the south side of Northern Avenue, which are separated by an arterial street and a landscape buffer along the north side of Northern Avenue. Lots that are a minimum of 80% of those lot sizes are not designed along the north side of Northern Avenue.

17. *Position lots across from the intersecting street at three way intersections, so that headlight intrusion into living areas is avoided.*

The plat designs will attempt to minimize lots positioned across from the intersecting street. However, the ultimate designs may necessitate such a placement in some instances.

18. *Spread grade changes gradually across the neighborhood to avoid major differences in elevation between adjacent lots, no more than 1 foot.*

The subdivision will be designed to minimize significant grade changes, but there will be no specific provision to limit grade change between adjacent lots.

19. *The creation of new flag lots or similar irregular lots is discouraged where such parcelization is not the prevailing pattern. Lot shapes generally should be simple and rectangular without narrow lot frontages, and flag lots should only be designed in rural or hillside areas. This does not preclude wedge-shaped cul-de-sac lots.*

The plat designs will attempt to minimize the use of flag lots or other similar irregular lots.

20. *Avoid acute angles where rear lot lines and side lot lines meet.*

The plats will be designed to avoid acute where rear and side lot lines meet, where possible.

21. *Provide straight side lot lines at right angles or radial to street lines. Avoid irregular shaped lots. See No. 19.*

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The subdivisions will be designed to provide, where possible, straight lot lines at right angles or radial to street lot lines. The use of knuckles, cul-de-sacs, curvilinear streets and the incorporation of open space through out Woolf Crossing may result in some instances where irregular lot lines are utilized.

22. Avoid lots that are isolated from the pattern of lots in a block.

The Subdivisions will be designed to avoid isolated lots, where possible.

23. Provide site triangles where driveway visibility may be limited on "key lots".

Site triangles can be provided where driveway visibility is limited on key lots.

24. Driveways are to be a minimum of 20' in length, exclusive of sidewalk or curb. Driveways which are designed to serve more than two cars in width (i.e., a three car garage) to incorporate an alternative treatment paving surface (to reduce the amount of pavement) such as: 1. A paving outline. 2. Parallel strips of asphalt. 3. Stamped or Colored concrete. 4. Aggregate or brick banding.

Driveways will be designed with a minimum 20' of length from the face of the garage to the sidewalk. The product mix does not offer more than two car front facing garages; therefore, the alternative treatment paving surface is not applicable.

25. Provide a difference of a least 2,000 square feet between the minimum lot size of two or more parcels in a master planned community

Woolf Crossing provides parcels with four different minimum lot sizes. The square foot difference between the smallest and largest minimum lot size is 3,900 square feet. The actual difference will be greater because lots larger than the minimum will be created through the use of cul-de-sacs, knuckles and curvilinear streets.

Street Layout

1. The creation of new private streets is discouraged except when compelling and clear findings can be made that the private streets would benefit the entire neighborhood.

At this time, no private streets are contemplated for Woolf Crossing. If the design concept changes, the developer will work with the City of Glendale to address design related issues for the private streets.

2. Gated communities are acceptable only when an interconnection to existing adjacent neighborhoods is not needed. Occasionally stub street may be necessary to ensure future access to adjacent parcels as required by the Transportation Department.

At this time, no gated entries are contemplated for Woolf Crossing. If the design concept changes, the developer will work with the City of Glendale to address design related issues for the gated communities.

3. Provide a minimum of two arterial street access points at quarter mile and half mile locations when developing adjacent to arterial roadways. Provide additional access points when appropriate to eliminate the need for the majority of residences located in a square mile to use only one or two streets fro ingress and egress.

Sufficient access points have been provided within Woolf Crossing that address the surrounding street configurations, including the realigned Sarival Road and the Northern Parkway. Given the impact of the Northern Parkway and 65 Ldn line, which defines the development parcels, these connections will not be at the quarter and half mile points.

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4. *Secondary access points are encouraged for fire department accessibility.*
Secondary access points have been provided to ensure adequate fire department accessibility.
5. *Provide a functional hierarchy of arterial, collector, and local streets, which reduce the speed, and volume of traffic on the local streets.*
A functional hierarchy of streets has been provided.
6. *Restrict direct access to arterial and collector streets from lots backing onto these streets by wide landscape tracts and non-vehicular access easements (NVAE).*
The subdivision has been designed with landscape tracts along the collector and arterial streets. If a lot is immediately adjacent to a collector street, a NVAE will be placed along the lot line to preclude access.
7. *Use cul-de-sacs, shorter block lengths, loops, knuckles, and eyebrows, extensively to provide a variety of lot orientations.*
Cul-de-sacs, shorter block lengths and knuckles have been provided to provide a variety of lot orientations.
8. *The typical width for local streets consists of a 32 - foot wide street width in a 50-foot right-of-way.*
The local streets will be designed to conform to the typical Glendale standards.
9. *Incorporate traffic calming devices such as landscape islands, horizontal speed islands, chokers, raised intersections, raised crosswalks, roundabouts, or another technique when needed to reduce the potential speed of traffic on long thoroughfares which sometimes cannot be avoided. The approval of the Transportation Director, and the Fire Department is required.*
If warranted, raised intersections can be installed at designated intersections along the collector roads.
10. *Limit local streets to a maximum of 600 feet and overlength cul-de-sacs to a maximum of 400 feet.*
Woolf Crossing uses a variety of street designs, such as cul-de-sacs and knuckles and provides significant integration of open space areas. These factors, combined with the lot layout standards create a varying streetscape. Although they will not be the standard, there will be areas within Woolf Crossing where street lengths will exceed 600 feet and cul-de-sacs will exceed 400 feet.
11. *Cul-de-sacs are to terminate on lots, a minimum of 15-foot wide landscape tract, or entrances to common open space areas, not blank walls or narrow un-useable remnants in the front yards.*
Woolf Crossing has been designed so that cul-de-sacs do not terminate on blank walls or narrow un-useable remnants in the front yards.
12. *Eliminate potential "short cut" maneuvers through a development by minimizing straight-long drives through the subdivision.*

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Woolf Crossing has been designed to minimize straight, long drives through the subdivision.

13. *Provide collector streets with a landscaped median that connects through a development with enhanced streetscape landscaping.*
The collector streets have been designed with a landscaped median entry to create enhanced streetscape landscaping (Refer to Figure 16A). The median will not be placed along the entire length of the collector.
14. *When houses back up to an arterial roadway a sidewalk is required to be located a minimum of 7 feet from the back of the curb, and a minimum of 8 from the back of the perimeter wall.*
Woolf Crossing will comply with this standard.
15. *Creating a safe, attractive, public environment that encourages pedestrian activity could be achieved by incorporating detached sidewalks on local streets and collectors (when houses face onto a collector) into neighborhoods. The width of the planting strip adjacent to the local street is to be 5 feet to allow the trees when full grown to provide a canopy over the sidewalk. A minimum of a 4-foot wide sidewalk is required.*
Woolf Crossing has been design to integrate detached sidewalks in the community. Based upon the right-of-way for cul-de-sacs and knuckles and the required pavement sections, the sidewalks may be attached at those locations.
16. *A minimum 6-foot wide detached sidewalk is required when located adjacent to all school sites. Design detached sidewalks to connect to the back of the handicap ramp at all intersections.*
The detached sidewalk adjacent to the school site will be designed with a 6' wide sidewalk, with the understanding that the additional sidewalk width will reduce the typical landscape section width.
17. *If detached sidewalks are not offered in a development then provide increased amounts of useable open space in addition to what is required in Part Four - Amenities.*
Woolf Crossing has been design to integrate detached sidewalks in the community, except at cul-de-sacs and knuckles.
18. *Fire hydrants are to be located 2 feet from the back of curb.*
Fire hydrants can be located 2 feet from back of curb.
19. *Provide a minimum of 8-foot P.U.E. between the right-of-way and perimeter wall to allow for adequate landscaped area.*
An 8' PUE can be provided.

Perimeter Improvements

1. *Enhanced entrances from arterial and collector streets to include: 1. Landscaped tracts and landscape medians. 2. Decorative paving material. 3. Feature lighting. 4. Monument signs. 5. Distinctive wall details. 6. Clearly distinguished primary and secondary entrances.*

In order to create a specific character for Woolf Crossing, the entrances from collector and arterial streets will be designed with enhanced features that may include a

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combination of landscaped tracts and medians, feature lighting, decorative paving at primary entries, monument signs, and distinctive wall details.

2. *Decorative paving and accent materials for crosswalks, walkways, entrance areas to provide special settings and designate pedestrian crossing areas.*
Woolf Crossing will utilize decorative paving and accent materials for primary entry points into the residential area.
3. *Entry features integrated with the entry monumentation to include pedestrian areas with stamped concrete or special hardscape material, water features, sculptures, fountain, ponds, or lakes.*
Woolf Crossing has been designed with entry features that integrate with the entry monumentation, pedestrian areas, and special hardscape material, but will not include water features, sculptures, fountains, ponds, or lakes.
4. *All entrance features and signs to be owned and maintained by a HOA and must not obstruct the sight visibility.*
All entrance features and signs will be owned and maintained by the HOA and will not obstruct the sight visibility.
5. *Site features such as natural ground forms, raised planters, large rock formations, stone, water and significant view corridors shall be identified and incorporated into the design of the sign.*
The entry feature will incorporate natural ground forms and raised planters among other techniques to provide an enhanced visual image at the sign. Water will not be used.
6. *All gate entries to be enhanced with light fixtures compatible with the design of the wall and high quality materials used for the gate and entry feature.*
At this time, there are no gated entries planned for Woolf Crossing. If areas are identified in the future that are appropriate for gates, they will be designed in a compatible manner with the design of the wall and incorporate high quality materials.

Walls and Decorative Fencing

1. *Perimeter theme walls along arterial and collector streets are to be of high quality compatible with the development concept.*
Perimeter theme walls along arterial and collector streets will be high quality and compatible with the development concept.
2. *Decorative walls are to be provided in all visible locations such as adjacent to collector streets and major entries. All areas that can be seen from public view to be designed with an enhanced theme wall.*
Decorative walls will be provided in all visible locations. Areas that can be seen from public view will be designed with an enhanced theme wall.
3. *A decorative masonry wall designed and constructed to provide sound attenuation is required adjacent to all arterial streets. The minimum height of this wall is 8 feet and 8 inches thick.*
The decorative masonry walls adjacent to arterial streets will be designed at a height of eight (8) feet and thickness of eight (8) inches.

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4. *Provide a 6-foot theme wall adjacent to all collector streets.*
A 6-foot theme wall will be provided adjacent to all collector streets.
5. *All walls are to be of an enhanced decorative surface with accent landscaping and design elements such as stone veneer, brick, planters, marble, rock, decorative pilasters, decorative caps, stone or tile insets, or other significant design features. Plain concrete block, split-faced blocks or single scored block is not acceptable.*
The interior subdivision walls that are visible from right-of-way and public/private spaces will have enhanced decorative surfaces that are accented by landscaping and other design elements. The curvilinear nature of the streets, combined with the amount of landscaping and open space areas that have been integrated into the design of Woolf Crossing will provide a pleasant streetscape.
6. *View fencing is to be used on lots adjacent to common open space areas when they will add to the amenities and improve security.*
View fencing will be located at appropriate areas as identified at the time of preliminary plat. The intent will be to provide view fencing at appropriate areas without sacrificing the privacy of the Woolf Crossing residents.
7. *Retaining walls on corner lots and return walls are to be finished with paint and stucco to match the neighborhood.*
Retaining walls on corner lots and return walls will either be of enhanced decorative surfaces or stuccoed and painted.
8. *All walls designed around any water feature such as swimming pool, Jacuzzis, waterfalls, ponds, etc. to be fully enclosed or appropriately protected consistent with the City of Glendale Pool Ordinance.*
Woolf Crossing does not contain any public water features. Any walls or fences around swimming pools and other similar features will comply with the City of Glendale pool ordinance.
9. *Establish pass throughs designed in a safe and secure manner to destinations such as neighborhood parks, trails, schools, transit, or shopping.*
One of the quality features of the Woolf Crossing design is to provide a significant amount of safe and secure pass throughs to connect various areas of the development.
10. *Perimeter walls are to be designed to break up long expanses. This can be accomplished through alternating materials or patterns, pilasters or landscape planters built into the design of the wall, angled alignments, curves, or staggers. Provide distinctive horizontal and vertical relief on perimeter walls adjacent to arterial and collector-street. The maximum horizontal run without variation is 150 feet. The variations should occur regularly and in a comfortable pattern.*
The design of the perimeter walls includes varying patterns and pilasters. Additionally, angled walls, staggered setbacks and curves will provide visual interest.
11. *All perimeter walls to be constructed in the first phase of development or concurrent with each phase of multi-unit development.*
Perimeter walls will be constructed concurrently with each phase of development.

Landscape

1. *Drought tolerant/low water use plants, trees, and shrubs are encouraged in right-of-way areas subject to the Arizona Department of Water Resources Drought Tolerant/Low Water Use Plant List.*
The proposed landscape materials will conform to the ADWR Drought Tolerant/Low Water use plant list.
2. *A minimum six-foot wide landscape tract to be located on all corner lots.*
A minimum 8' wide landscape tract will be located on all corner lots.
3. *A landscape tract with a minimum width of 30-feet to be provided along all arterial streets as a buffer for the neighborhood and for lots that may back or side onto the arterial roadway.*
A landscape tract with a minimum width of 30 feet will be provided along arterial streets, except along Sarival road where the minimum width shall be 20 feet. Woolf Crossing will provide an average landscape setback of forty (40) feet along Sarival Road. This landscape tract has been designed with additional depth to accommodate variations in the perimeter walls, enhancing the quality of the streetscape.
4. *Provide a 15-foot landscape tract adjacent to all collector roadways. These tracts may be used for storm water retention or to meet open space requirements.*
A minimum 15 foot landscape tract will be provided along the collector streets. As with the arterial street design, the landscape tracts will be designed with varying depths and views into open space areas to provide a heightened sense of openness within Woolf Crossing.
5. *All tracts to be owned and maintained by the HOA.*
The HOA will own and maintain landscape tracts.
6. *Each lot is to have at least one associated street tree, selected for consistency with the dominant and/or approved block street tree and planted within the 5-foot landscape area between the curb and the sidewalk.*
Each lot will have at least one tree that will be planted within the landscape area between the curb and sidewalk.
7. *Landscape tracts in the adjacent street right of way are to be maintained by a HOA.*
Landscape tracts will be maintained by the HOA.
8. *Provide increased landscaped buffers in addition to the minimum 30-foot requirement along arterial streets.*
As stated above, Sarival road has a minimum width shall be 20 feet (average of 40 feet), minimum 30 foot landscape buffers along all other arterials, with a minimum 40 foot buffer being provided along Northern Avenue. Woolf crossing has been designed with numerous offsets to provide deeper landscape buffers along the arterial streets.

Stormwater Retention

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1. *All stormwater retention areas subject to the Engineering Design and Construction Standards.*
Stormwater retention areas will be subject to Engineering Design and Construction standards as determined at the time of preliminary and final plat.
2. *Retention basins must be owned and maintained by a HOA.*
The HOA will own and maintain the retention basins.
3. *Contour the sides and bottoms of basins to create a natural looking appearance. Use varied slopes and curvilinear edges to create a more natural looking facility instead of rectangular forms and long stretches. No single rectangular basins will be allowed. All basins must be landscaped to meet or exceed the requirements of the Landscape Ordinance.*
The retention basins will be designed to create a natural looking appearance through the use of curvilinear edges. Landscaping will comply with the Landscape Ordinance.
4. *Retention areas to meander through the development as a green belt.*
The retention areas have been designed as integrated open space areas in Woolf Crossing.
5. *Locate retention areas so they are visible, attractive, and accessible for recreational use. All basins must have adequate street frontage.*
The retention areas have been designed as visible and attractive, with adequate street frontage.

Open Space

1. *A minimum of 15% open space is required in medium lot developments. Substantially increase open space in excess of 15% for small lot developments, and provide not less than 10% for large lot developments.*
Woolf Crossing has been designed to provide 21.2% of the net residential land area as open space.
2. *The areas that may be included in the calculation of open space include: dedicated park sites, multi-use paths, equestrian and hiking trails, private parks, and swimming pools or water gardens. Perimeter landscape areas used for decorative purposes only adjacent to the right-of-way may not be counted towards the total open space.*
Open space will be calculated in accordance with the City's guidelines. Perimeter landscape areas adjacent to multi-use trails will not count towards open space.
3. *Open space areas may also include areas used for stormwater retention, but must provide active or passive recreational opportunities as defined in the Manual.*
Acceptable.
4. *Utilize the existing linear open space areas such as Agua Fria, New River, Skunk Creek, Arizona Canal, Grand Canal, and Thunderbird Paseo Park as possible view corridors, connections, and trail systems whenever possible.*
Not Applicable.

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5. *If golf courses are proposed within a development, the overall area used for the golf course may not account for the total open space in an effort to allow for other amenities within the project boundaries.*

No golf courses are located within Woolf Crossing.

6. *Show any relationship to the City's trails, parks, or schools in the area and provide connectivity to the adjacent neighborhoods., off-site trails, paths, bikeways, and transit areas.*

Woolf Crossing has been designed with a significant amount of connectivity within the development. As the first master planned community in the area, there are no surrounding City trails for connection.

7. *Active play areas are to be carefully located and designed to ensure safety and compatibility. Useable open space areas that include tot lots and active play equipment should be located "central" to the neighborhood or in each phase of a development if designed as a multi-phased project.*

The activity areas within Woolf Crossing have been carefully located and designed to ensure safety and compatibility.

8. *Open space areas used for active recreational activities such as tot lots, basketball, volleyball, etc. and the access to the areas cannot be inundated by storm-water or used for water retention purposes.*

Active recreational areas have been designed to be free from stormwater in the ten-year storm event.

9. *Design retention areas accordingly to prevent all open space from being used for retention.*

Retention areas have been designed so that not all open space areas are used for retention.

10. *Design active open space for variety of activities for all age groups such as: walking, sports, neighborhood events, etc. Amenities should include but not be limited to: Tot lots, sport court, basketball, amphitheaters, tennis courts or volleyball with sand court, barbecue areas with ramadas, cabanas, or gazebos, courtyards with bench seating, fountains, water gardens, pool, or lakes by means of effluent.*

The amenity areas for Woolf Crossing have been designed with a wide variety of uses that comply with the intent of the Design Guidelines.

11. *Integrate bike racks in all passive and active open space areas.*

Bike racks will be integrated into active open space areas where appropriate.

12. *Tot lots and other active play equipment to be covered and located adjacent to each other to function as a central activity center. Design active recreational opportunities for all ages adjacent to each other to allow a diverse recreational setting.*

Multi-modal play structures in the play areas will be covered. The play areas will be designed to function as an activity center and to allow for a diverse recreational setting.

13. *Passive open space areas include ground cover or turf with low growing plant and theme trees incorporated throughout with lighting, benches in covered areas to be placed*

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throughout the development to offer restive breaks and views, and drinking fountains with trash receptacles to be maintained by a HOA.

Open space areas and linkages will be designed with lighting, drink fountains where appropriate, benches in shaded areas, and trash receptacles that will be maintained by the HOA.

14. *Design passive open space areas such as courtyards or gazebos in a central location within the neighborhood to promote a meeting place for residents.*

A park is being provided adjacent to the school that can act as a meeting place for residents.

15. *Design open space areas toward the main entrance of the neighborhood and open to street view to create focal points and scenic views.*

Open space areas have been designed near neighborhood entrances to create street views and focal points.

16. *Incorporate public art into passive open space areas.*

The landscape plan for Woolf Crossing does not incorporate public art into open space areas.

17. *Provide a sufficient amount of open space and facilities to match the scale of the development.*

There is sufficient open space to match the scale of the development.

18. *Integrate pathways with the local street system to maximize access and flexibility of use.*

Pathways and/or detached sidewalks have been integrated with the local street system to maximize access and flexibility of use.

19. *To provide connectivity throughout the neighborhood design open space to meander as a greenbelt system.*

The open space and retention areas have been designed to provide connectivity and function as a greenbelt system.

20. *Use view fences on lots adjacent to common areas when they will add to the amenity and improve security. The design of outdoor spaces shall recognize and incorporate views, climate, and the nature of outdoor activities.*

View fencing will be located at appropriate areas as identified at the time of preliminary plat. The intent will be to provide view fencing at appropriate areas without sacrificing the privacy of the Woolf Crossing residents.

21. *Increase grade changes in open space areas gradually.*

The grading plan for Woolf Crossing will attempt to comply with this guideline.

22. *Provide turf or a turf equivalent in all areas used as active open space.*

A turf or turf equivalent will be provided in active open space areas that are identified for uses such as ball fields, soccer fields, and other similar activity areas.

23. *Decorative theme lighting is to be placed at all pedestrian walkways and active play areas throughout a neighborhood.*

City of Glendale RDDM Comparison

Decorative theme lighting will be provided on pedestrian walkways and active play areas.

24. *Cross sections for walkways, trails/paths shall have a minimum overall width of 20 feet with a minimum of 10 feet dedicated to a multi-use path, exclusive of any vehicle and/or landscape areas, and 10-feet (5 feet on each side) dedicated to landscaping directly adjacent to the path.*

Cross sections for trails will have a minimum width of 8 feet for the concrete multi-use path on arterials, along the south side of Northern Parkway, and through the open space adjacent to the LCLU area. A minimum of 6 feet shall be provided on collectors.

Design Criteria

1. *All requests for zoning, preliminary or final plat are to be accompanied by: 1. A minimum of 4 floor plans and 4 distinct and different elevations for each floor plan. 2. Development of 30 lots or less to provide three floor plans and three distinct and different elevations for each floor plan. 3. Color and material palette illustrating building materials, paint colors, and finish schemes proposed for the roof, walls, and any other architectural details.*

A minimum of four floor plans and three distinct and different elevations will be provided.

2. *Design elements and detailing to be continued completely around the structure with the same importance put on all sides. Such design elements shall include. 1. Articulation of wall planes, a variety of roof forms, variation in roof heights, and ridgelines, or other architectural treatments. 2. Accent treatments and finishing details such as pop outs, reveals, and recesses are required around all windows (dual pane) and doors, gable ends and wall expanses on all elevations. Window frames and mullions must be finished with baked enamel paint or anodized. 3. Garage doors made from sectional metal or high quality wood or equivalent. Window panels are encouraged to be integrated into the design of the garage door. 4. Pillars, columns, and posts are to be enhanced with stucco and other architectural treatments such as brick or stone veneer. 5. The main feature, which shall not be the garage door, and to be prominently placed on the elevation either facing the street or at an angle. The inclusion of front porches on new houses or remodels is encouraged as a symbol of entry.*

Design elements and detailing will be continued around the structure. The design elements in Woolf Crossing will include the items identified in the design guidelines.

3. *Linear repetitive streetscape appearance and building facades shall be avoided by providing variations between the front elevations.*

The homes within Woolf Crossing will provide variations between the front elevations.

4. *Provide a variety of roof forms and ridgelines*

A variety of roof forms and ridgelines will be provided.

5. *All building materials to be durable and appropriate for their intended use.*

Woolf Crossing will provide appropriate and durable building materials.

6. *Colors to relate well to the house and area and be appropriate for the proposed style of architecture.*

The color palette for Woolf Crossing is designed to complement the homes and other features of the community.

City of Glendale RDDM Comparison

7. *Metal flashing, vents, pipes, electrical panels and other exposed metal must be painted to match the color of the roof or house.*
These items will be painted.
8. *Completely screen all ground mounted mechanical equipment behind a fence or gate.*
Ground mounted mechanical equipment will be screened.
9. *Box all fireplace chimneys to avoid exposed metal flutes.*
Fireplace chimneys will be boxed.
10. *Porches, balconies, and/or seating areas on the front of the home are encouraged to be incorporated into the design of the dwelling unit to provide covered area to protect residents from weather, enhance the elevation, provide more depth to the dwelling unit and create a sense of arrival.*
Where possible, the home designs will incorporate porches and seating areas into the design of the dwelling unit. Floor plans have been submitted with the PAD application.
11. *All front entryways to be emphasized, lighted and open. Side entries and doorways are allowed if the door is visible from the street and not behind the garage or living area. Narrow front porches are not permitted in order to avoid potential safety hazards.*
The home designs for Element Homes comply with the intent of the desire to emphasize front entryways.
12. *A minimum of one window from the living area of the house on the first floor must be visible from the street.*
A minimum of one window from the living area will be designed to be visible from the street, except in instances where front porches or enhanced entryways are provided in conjunction with side entry garages.
13. *The same front or rear elevations should not be located directly across from one another.*
The same front elevations will not be located directly across from one another. However, given the different product designs, rear elevations may be across from one another but should not create a negative aesthetic appearance.
14. *Patio covers must be provided as a standard feature and match the architecture of the house and the roof material.*
Patio covers are provided as a standard feature and match the architecture of the house.
15. *Integrated patio covers are encouraged. Columns must be enhanced to match the house such as stucco, brick, or stone veneer. If a flat roof is provided, it must be screened with a parapet or similar treatment.*
The patio covers are designed as an integrated feature.
16. *Clay or concrete tile to be used as a roof material.*
The roof material will be clay or concrete tile.
17. *A minimum of two coach lights to be placed at the face of the garage.*

City of Glendale RDDM Comparison

A minimum of two carriage lights will be provided as an option to the homeowner.

18. *Accessory buildings to match the architectural style of the principle structure including materials and colors.*

Accessory buildings will match the architectural style of the principal structure.

19. *All return walls must be finished with stucco and paint to match the development.*

Return walls will be painted to match the building, but will not be stuccoed.

20. *Recessed garages have been addressed in the small and medium lot development expectations under Lot Layout.*

Not Applicable.

21. *Garages should not be the dominant feature on the lot but shall be located a minimum of 5 feet back from the entry feature or living area in medium and large lot developments. In small lot developments the garage should be located in excess of the 5-foot requirement.*

The home product to be utilized by Element Homes include varying garage orientations and depths to avoid a garage dominant streetscape through the use of side entry garages and recessed main garage designs on many of the home designs. In no neighborhood will more than 50% of the model designs available include a front facing garage in front of the living space.

22. *If side entry garages are incorporated into a development with the driveway internal at the front of the house or external on the side of the lot the front facing wall must be architecturally integrated with the design of the home.*

The front facing wall of the side entry garage will be designed as architecturally integrated with the design of the house.

23. *Courtyard walls a maximum 3' in height in the front yard or side yards adjacent to the driveways to create gathering areas are encouraged.*

Courtyard walls will be provided as an option to homebuyers with either a 3 foot or 6 foot wall option.

24. *Provide decorative pilasters, molding, cornices, brick stone, masonry, or other façade and accent materials to encourage curb appeal.*

These decorative features will be provided.

25. *Add brick, river rock, natural stone, or masonry to elevations in each neighborhood to add a distinctive finishing touch to the home.*

Each home model has three different elevations create distinctive finishes for the exterior of the homes.

26. *Roof mounted mechanical equipment is prohibited.*

Roof mounted mechanical equipment is not permitted within Woolf Crossing.

27. *Each home to provide a logical location for the storage of trash receptacles which is fully screened from public view.*

Logical storage places for trash receptacles will be provided.

28. *The location of the house on the lot, windows, orientation, building height and location of on-site open space shall consider preservation of the privacy of adjacent development.*

The design of Woolf Crossing and the home designs will consider preservation of privacy of adjacent developments.

APPENDIX C

RESIDENTIAL ARCHITECTURAL ELEVATIONS AND FLOOR PLANS

Woolf Crossing

elementHomes

	Elevation A					Elevation B					Elevation C				
Scheme	A.2	A.3	A.4	A.5	A.6	B.1	B.2	B.4	B.5	B.6	C.1	C.3	C.4	C.5	C.6
Roof Tile	R-541 Santa Clara	R-540 Solano Blend	R-540 Solano Blend	R-540 Solano Blend	R-544 Cocoamo Grey	SL-513 La Jolla	SL- 411 Chestnut Brown	SL-544 Cocoamo Grey	SL-541 Santa Clara	SL-540 Solano Blend	SL-540 Solano Blend	SL-544 Cocoamo Grey	SL-411 Chestnut Brown	SL-541 Santa Clara	SL-544 Cocoamo Grey
Body	8724M Meadowlark	213 Tratanan	8235D Brush Box	8214M Tobacco Road	8215D Tattersall Brown	8674M Muddy River	8224M Balsam Bark	8184M Moselle	8213M Plantation Beige	8673M Tavern Taupe	8234M Daplin	elementHomes Desert Grey	8734M Bark Mulch	8683W Tinderbox	8723M Desert Tumbleweed
Popout/ Recesses	8675D Wooden Oar	521 Tuscany	8735D Wild Country	8225D Autumn Wheat	8213D Plantation Beige	8675D Wooden Oar	8736N Little Bighorn	8200W Bleached Sand	8675D Wooden Oar	8675D Wooden Oar	8675D Wooden Oar	8685D Woodlet	8224M Balsam Bark	391 Rolling Hills	8725A Coach House
Fascia	8724M Meadowlark	213 Tratanan	8235D Brush Box	8214M Tobacco Road	8215D Tattersall Brown	8675D Wooden Oar	8736N Little Bighorn	8200W Bleached Sand	8675D Wooden Oar	8675D Wooden Oar	8675D Wooden Oar	8685D Woodlet	8224M Balsam Bark	391 Rolling Hills	8725A Coach House
Siding & Specialty Stucco	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	elementHomes Lost Summit	elementHomes Jamaican Earth	8675D Wooden Oar	8225D Autumn Wheat	8304M Washed Suede	elementHomes Jamaican Earth	8223M Sienna Sand	521 Tuscany	8675D Wooden Oar	8225D Autumn Wheat
Accent Front & Shutters	8726N Mocha Brown	elementHomes Briar	395 Alfresco	8655D Pinedale	8675D Wooden Oar	5344D Chocolate Mousse	8286N Burntside	395 Alfresco	8305D Jericho Brown	8645D Greylock	8306N Alcazar Brown	8736N Little Bighorn	395 Alfresco	8755A Spicenut	8716N Western Reserve
Garage	elementHomes Jamaican Earth	8674M Muddy River	8725A Coach House	8736N Little Bighorn	8226N October Oak	8674M Muddy River	8224M Balsam Bark	8184M Moselle	8213M Plantation Beige	8673M Tavern Taupe	8234M Daplin	elementHomes Desert Gray	8734M Bark Mulch	8683W Tinderbox	8723M Desert Tumbleweed
Iron	8716N Western Reserve	8716N Western Reserve	8716N Western Reserve	8716N Western Reserve	8716N Western Reserve	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Stone	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	80% Bucks County Southern LedgeStone CSV-2056 20% Bucks Country Dressed Fieldstone CSV-2030	80% Chardonnay Country LedgeStone CSV-20006 20% Chardonnay Dressed Fieldstone CSV-2042	80% Aspen Country LedgeStone CSV-20008 20% Aspen Dressed Fieldstone CSV-2040	80% Chardonnay Country LedgeStone CSV-20006 20% Chardonnay Dressed Fieldstone CSV-2042	80% Carmel Country LedgeStone CSV-20007 20% Brandywine Dressed Fieldstone CSV-2029	CSV-2056 Buck's County Southern LedgeStone	CSV-20044 Shale Country LedgeStone	CSV-20006 Chardonnay Country LedgeStone	CSV-2056 Buck's County Southern LedgeStone	CSV-2054 Chardonnay Southern LedgeStone
Brick	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	CB-4057 California Drift Cultured Brick	CB-4052 Antique Red Cultured Brick	CB-4052 Antique Red Cultured Brick	CB-4052 Antique Red Cultured Brick	CB-4057 California Drift Cultured Brick

Manufacturers: Paint = Frazee
Roof Tile = Hanson Rooftile
Stone = Cultured Stone

See elevations for stone veneer and siding locations.
Specialty stucco = Color blocking on front elevations



Woolf Crossing



elementHomes

ELEVATION STREETSCAPE
LINDEROTH ASSOCIATES, INC.



Woolf Crossing



FLOOR PLAN
SCALE: 1/8" = 1'-0"



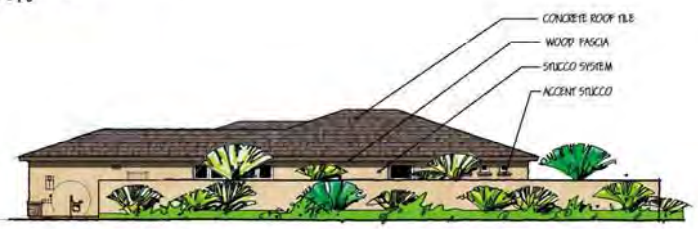
FRONT ELEVATION
SCALE: 1/8" = 1'-0"



REAR ELEVATION
SCALE: 1/8" = 1'-0"



LEFT ELEVATION
SCALE: 1/8" = 1'-0"



RIGHT ELEVATION
SCALE: 1/8" = 1'-0"

elementHomes

PLAN-4002
ELEVATION 'C'

LINDEROTH ASSOCIATES, INC.



Woolf Crossing



SECOND FLOOR PLAN
SCALE 1/8" = 1'-0"



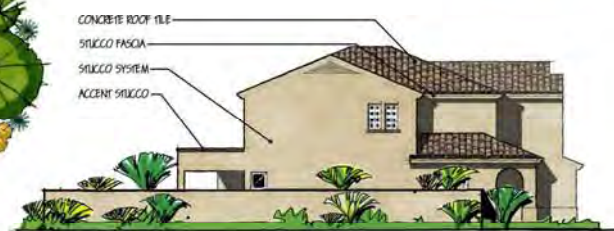
FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"



FRONT ELEVATION
SCALE 1/8" = 1'-0"



REAR ELEVATION
SCALE 1/8" = 1'-0"



LEFT ELEVATION
SCALE 1/8" = 1'-0"



RIGHT ELEVATION
SCALE 1/8" = 1'-0"



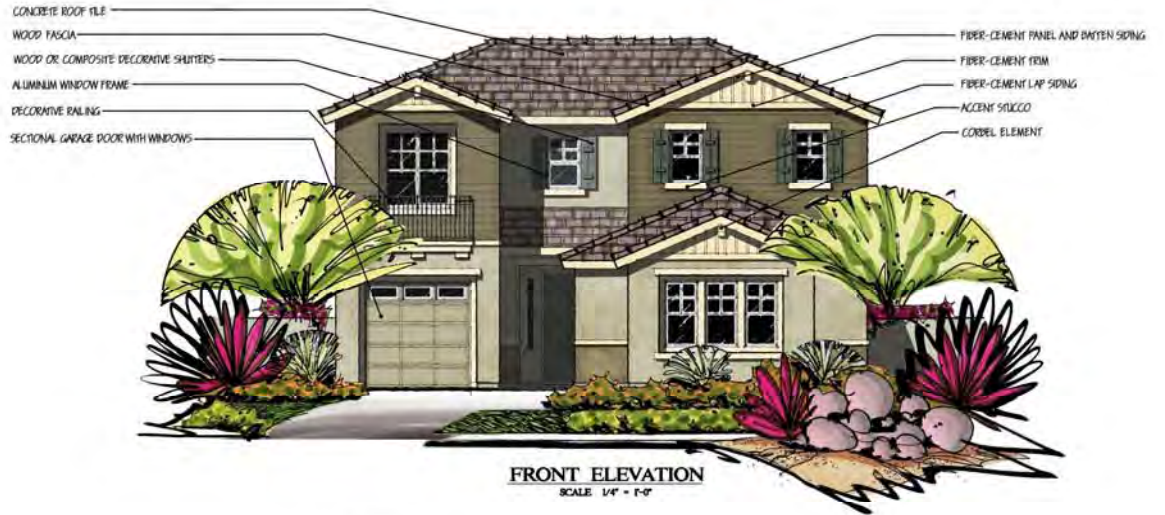
Woolf Crossing



SECOND FLOOR PLAN
SCALE 1/8" = 1'-0"



FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"



FRONT ELEVATION
SCALE 1/4" = 1'-0"



REAR ELEVATION
SCALE 1/8" = 1'-0"



LEFT ELEVATION
SCALE 1/8" = 1'-0"



RIGHT ELEVATION
SCALE 1/8" = 1'-0"



Woolf Crossing

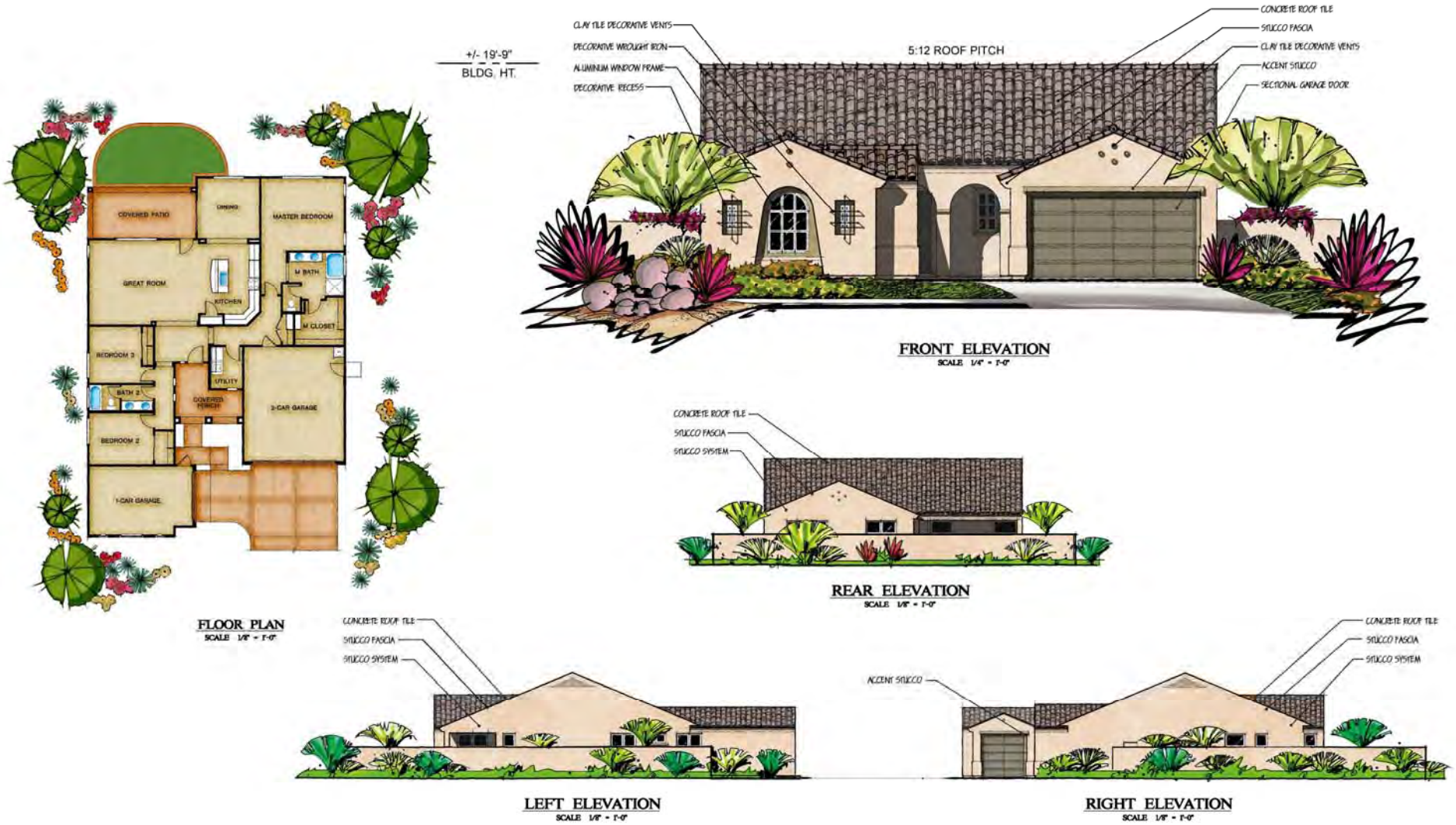


elementHomes

ELEVATION STREETSCAPE
LINDEROTH ASSOCIATES, INC.



Woolf Crossing



elementHomes

PLAN-5001
ELEVATION 'A'

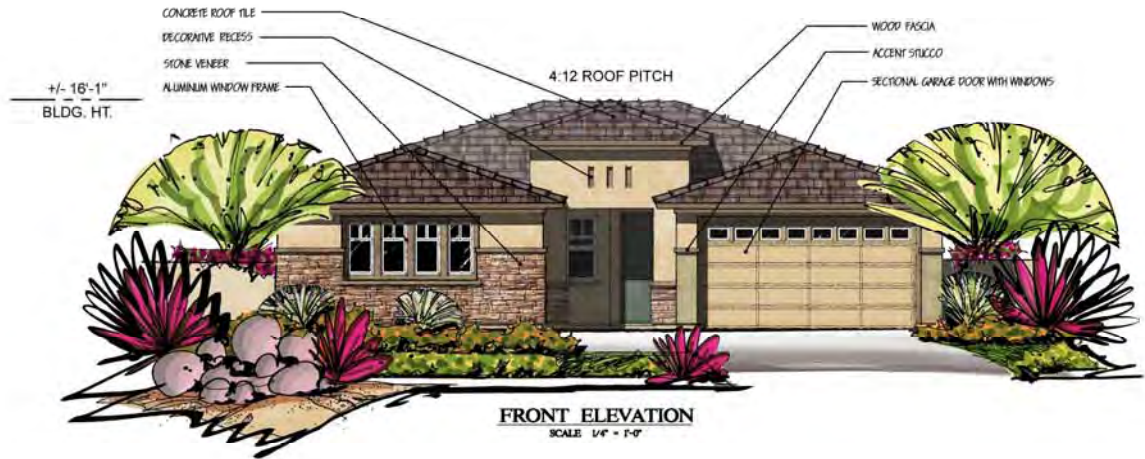
LINDEROTH ASSOCIATES, INC.



Woolf Crossing



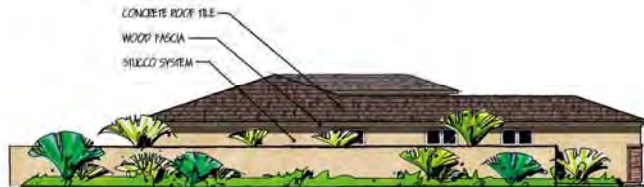
FLOOR PLAN
SCALE 1/8" = 1'-0"



FRONT ELEVATION
SCALE 1/8" = 1'-0"



REAR ELEVATION
SCALE 1/8" = 1'-0"



LEFT ELEVATION
SCALE 1/8" = 1'-0"



RIGHT ELEVATION
SCALE 1/8" = 1'-0"

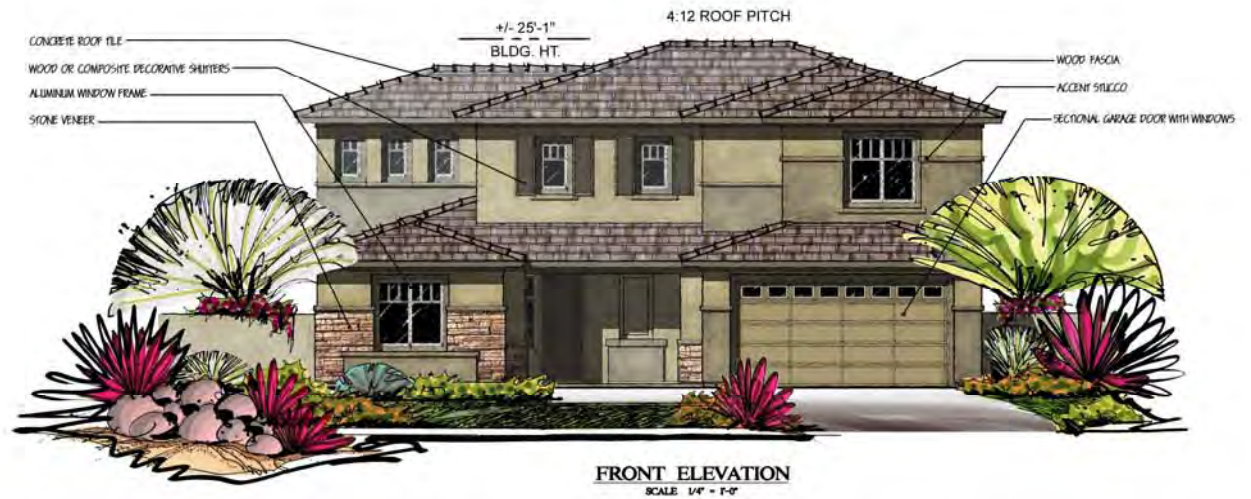
elementHomes

PLAN-5002
ELEVATION 'C'

LINDEROTH ASSOCIATES, INC.



Woolf Crossing



elementHomes

PLAN-5003
ELEVATION 'C'
LINDEROTH ASSOCIATES, INC.



Woolf Crossing



elementHomes

ELEVATION STREETSCAPE
LINDEROOTH ASSOCIATES, INC.



Woolf Crossing



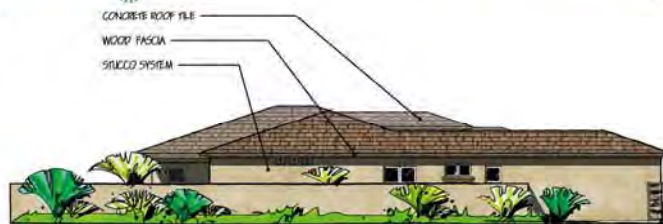
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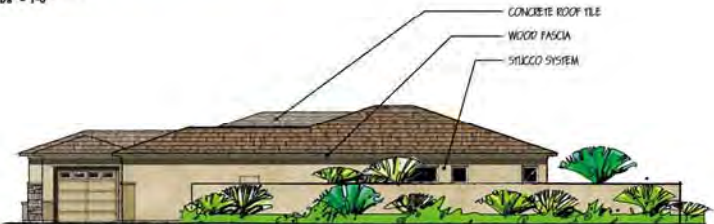
FRONT ELEVATION
SCALE 1/8" = 1'-0"



REAR ELEVATION
SCALE 1/8" = 1'-0"



LEFT ELEVATION
SCALE 1/8" = 1'-0"



RIGHT ELEVATION
SCALE 1/8" = 1'-0"

elementHomes

PLAN-5501
2320 S.F.
ELEVATION 'C'

LINDEROTH ASSOCIATES, INC.



Woolf Crossing



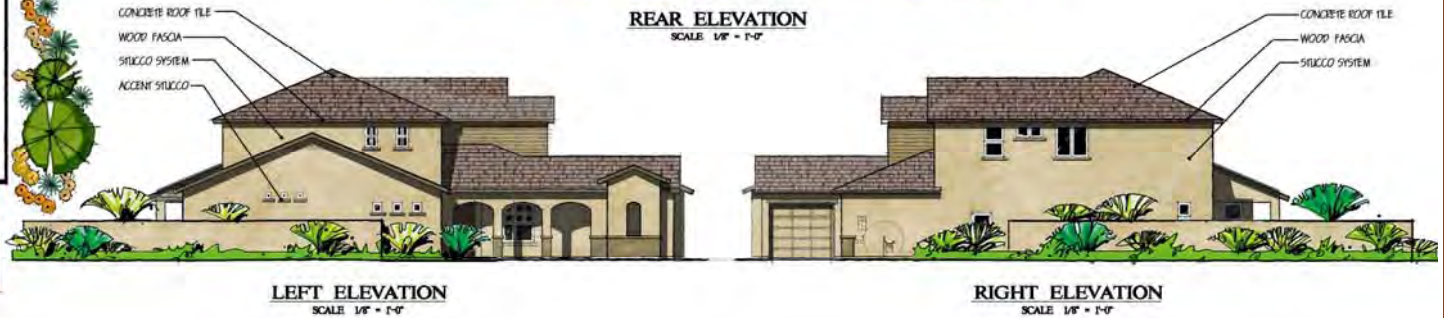
elementHomes

PLAN-5503
3310 S.F.
ELEVATION 'B'

LINDEROTH ASSOCIATES, INC.



Woolf Crossing



elementHomes

PLAN-5504
3546 S.E.
ELEVATION 'B'

LINDEROTH ASSOCIATES, INC.



Woolf Crossing



FLOOR PLAN
SCALE 1/8" = 1'-0"



FRONT ELEVATION
SCALE 1/4" = 1'-0"



REAR ELEVATION
SCALE 1/8" = 1'-0"



LEFT ELEVATION
SCALE 1/8" = 1'-0"



RIGHT ELEVATION
SCALE 1/8" = 1'-0"

elementHomes

5505
2905 S.F.
ELEVATION 'B'

LINDEROTH ASSOCIATES, INC.



Woolf Crossing



elementHomes

CLIVTON STREETSCAPE
LINDBERT ASSOCIATES, INC.



Woolf Crossing



FLOOR PLAN
SCALE 1/8" = 1'-0"



FRONT ELEVATION
SCALE 1/8" = 1'-0"



REAR ELEVATION
SCALE 1/8" = 1'-0"



LEFT ELEVATION
SCALE 1/8" = 1'-0"



RIGHT ELEVATION
SCALE 1/8" = 1'-0"

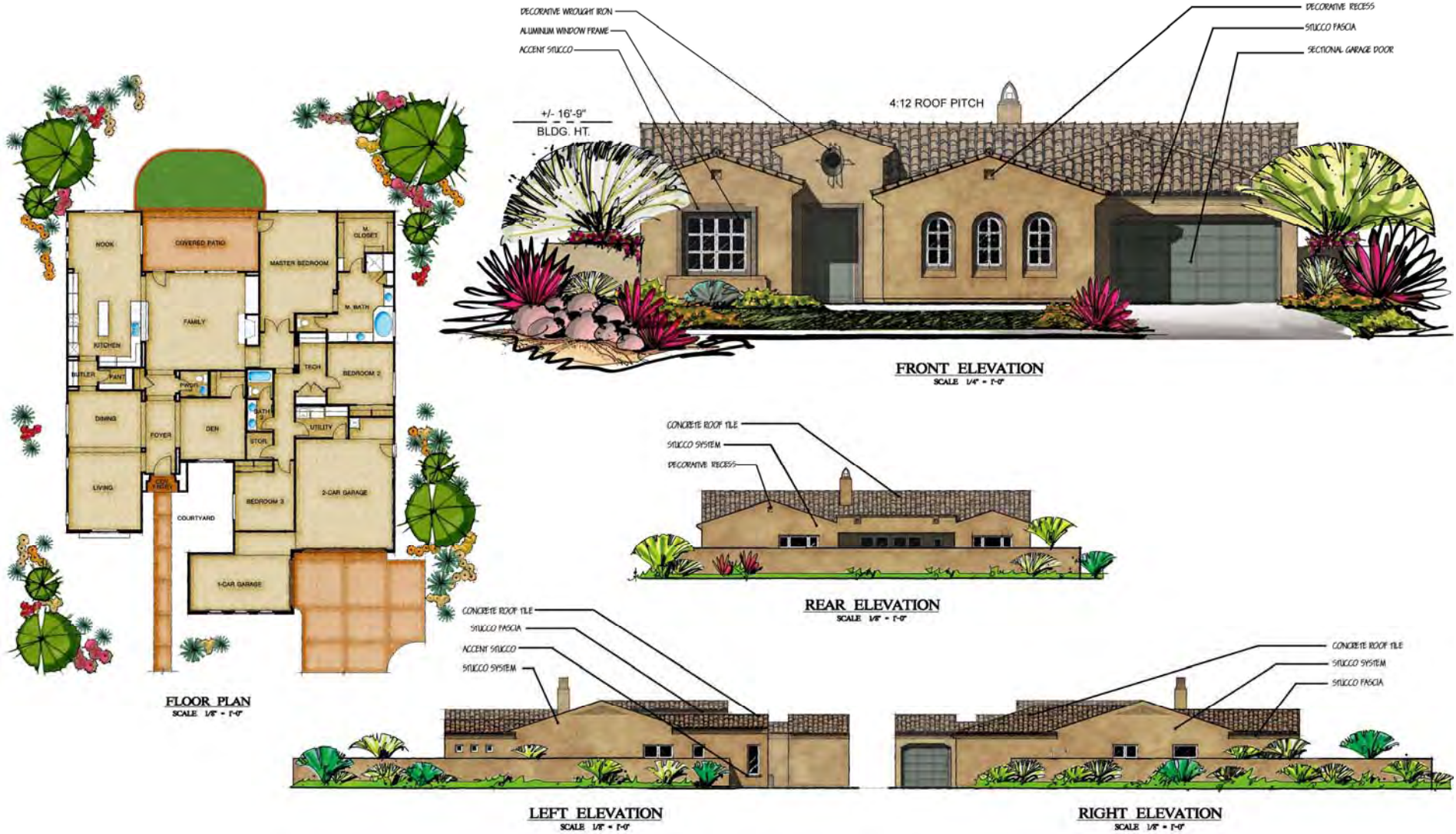
elementHomes

PLAN-6501
ELEVATION 'B'

LINDEROTH ASSOCIATES, INC.



Woolf Crossing



elementHomes

PLAN-6502
ELEVATION 'A'

LINDEROTH ASSOCIATES, INC.



Woolf Crossing



SECOND FLOOR PLAN
SCALE 1/8" = 1'-0"



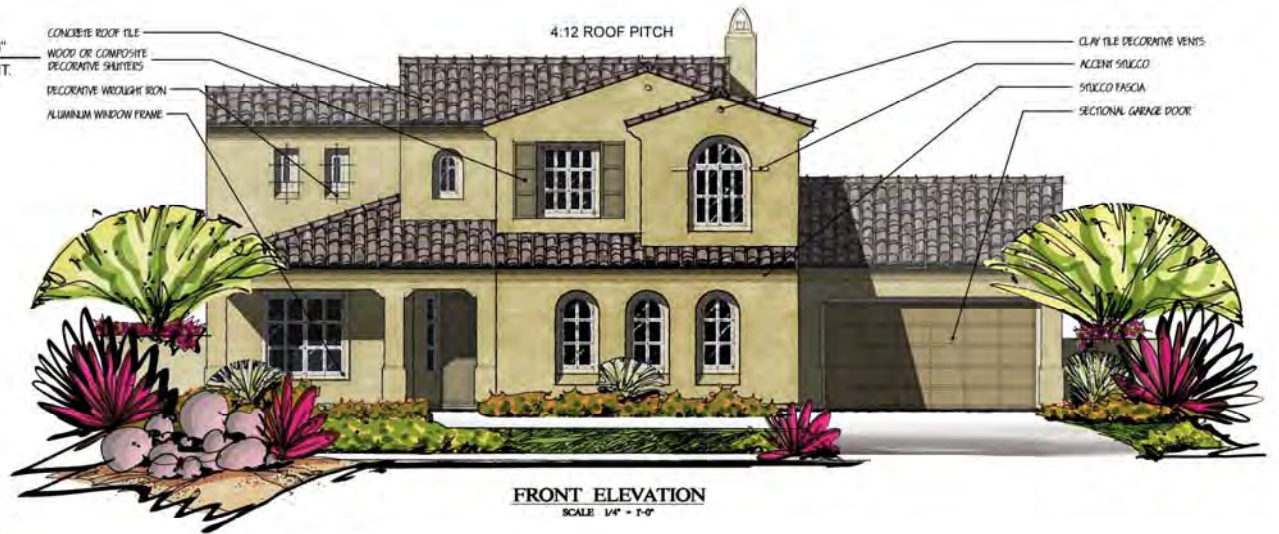
FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"

+/- 26'-11"
BLDG. HT.

4:12 ROOF PITCH



Woolf Crossing



elementHomes

PLAN-6504
ELEVATION 'A'

LINDEROTH ASSOCIATES, INC.



APPENDIX D

TRAFFIC IMPACT STUDY EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This report documents a traffic impact analysis performed for a mixed use master planned development consisting of low density, medium density, and high density residential, commercial, employment, office, park, mini-storage and school land uses. The Woolf Crossing development is located north of Northern Avenue, south of Olive Avenue, west of Reems Road and east of the Loop 303 within Maricopa County, Arizona. The development falls within the current City of Glendale planning area, and includes approximately 800 acres of undeveloped land

Civtech Inc. has been retained by Element Homes to perform the traffic impact analysis for the proposed Woolf Crossing during the Development Master Planning (DMP) and RUPD processes.

The purpose of this study is to address traffic and transportation impacts of the proposed development on the surrounding streets and intersections. This traffic impact study was prepared based on criteria set forth by the City of Glendale. The specific objectives of the study are:

1. To evaluate lane requirements on all existing roadways and at all existing intersections within the study area.
2. To determine future level of service for all proposed major intersections within the study area and recommend any capacity related improvements.
3. To determine necessary lane configurations at all major intersections within the proposed development to provide acceptable future levels of service.
4. To evaluate the need for future traffic control changes within the proposed development.
5. To evaluate entry spacing along access controlled corridors.
6. To evaluate the need for auxiliary lanes at stop and signal controlled intersections.
7. To evaluate and recommend pedestrian and bike access corridors.

The development is proposed with 656 dwelling units of single family residential. It also includes 188 acres of regional retail, 31 acres of office, 172 acres of mixed use employment, a 5-acre park and one 15-acre elementary school site.

This study evaluates two horizon years, 2007 and 2027. It was assumed that Phase 1 consisting of portions of section 31 would be under construction/opening by the 2007 horizon year with perimeter access from Olive Avenue, Northern Avenue and Sarival Avenue. The entire Phase 1 site was evaluated in a build out condition for the 2007 horizon year. The additional properties are anticipated for development between the 2007 opening year and the 2027 future year with the addition of primary access points along Reems Road.

The proposed development is expected to generate 6,909 daily external trips in 2007, with 400 occurring in the AM peak hour and 622 occurring in the PM peak hour. The buildout of the Woolf Crossing development is anticipated between the 2007 opening year and the future year of 2027. The proposed development is expected to generate 33,268 daily external trips in 2027, with 2,715 occurring in the AM peak hour and 3,194 occurring in the PM peak hour. To ensure that the estimate of traffic impact is conservatively calculated, it is assumed that the development will attract 100 percent of its trips upon buildout in 2027.

The site is split to the north and south by the future alignment of the Northern Parkway. The East-West Mobility Study, conducted by the Maricopa Association of Governments (MAG), was prepared to determine if and where additional east-west regional routes were required in this area. It also assisted in the determination of future potential parkway locations. The Northern Parkway was a preferred alignment for this new corridor. A Design Concept Report is currently underway by the City's consultant to determine the exact location and configuration of the Northern Parkway. The Design Concept Report (DCR) was obtained for use in determining anticipated future traffic along the alignments within the Woolf Crossing study area. The Regional Transportation Plan (RTP) recently approved by voters in the November 2004 election provides funding for the upgrading of Northern Avenue to a Parkway from Grand Avenue to Loop 303. The Maricopa County Department of Transportation (MCDOT) is currently working on Design Concept of the Loop 303 from Clearview Boulevard to Indian School Road with intersection improvements located at both Olive Avenue and Northern Avenue. According to the most recent edition of the Northwest Area Transportation Study, the Northern Parkway is part of the enhanced corridors network and would be located on a separate east-west alignment from Northern Avenue. The White Tank Area Plan indicates that the Parkway will be located on the same alignment as Northern Avenue. For the purposes of this study (and per the current DCR) it was assumed that the Northern Parkway would operate independently of Northern Avenue and would be located approximately ½ mile north of Northern Avenue, south of the Olive Avenue alignment.

Per the request of the City of Glendale, additional analysis representing the impacts of the development on the surrounding street network if the Sarival interchange reverts to a half diamond has been included in the Appendix.

According to City of Glendale Arterial Street Standards Map (Detail G-300) Olive Avenue east of 67th Avenue is classified as an A-2 arterial with a street section as shown in the City's typical standards. Northern Avenue is also classified as an arterial east of 67th Avenue with an A-4 section as shown in the City's typical street sections. There are no guidelines or recommendations for Olive Avenue or Northern Avenue west of 67th Avenue. These classifications and sections were designated prior to knowledge of the Northern Parkway which provides a "super street" as a parallel access located ½-mile from each of these major streets.

Both Olive Avenue and Sarival Avenue are considered roads of regional significance by MCDOT within the project area. Northern Avenue is classified as a principal arterial and Reems road as a minor arterial street according to the *MCDOT Street Atlas*.

The proposed phase 1 development will provide four major entry points for ingress/egress from the surrounding roadway network. Two major access points are located north of the Northern Parkway alignment. Two secondary points of access are also located north of the Northern Parkway alignment and provide additional access for the development. Two major access points are provided south of the Northern Parkway alignment with two secondary access points to assist circulation. Woolf Crossing does not access the Northern Parkway. It has been assumed for the traffic modeling prepared for this analysis that an overpass/underpass at both Sarival Avenue and Reems Road crossing the Northern Parkway will be maintained for circulation. A half diamond interchange along the Northern Parkway is anticipated at Sarival Avenue and will provide an eastbound on-ramp and a westbound off-ramp. A study, prepared by Civtech under separate cover, supports the inclusion of a full diamond interchange at Sarival Avenue with roadway realignment through the Woolf Crossing development. Therefore, a full diamond traffic interchange has been assumed along the Northern Parkway with both Sarival Avenue and Reems Road. It has been assumed that Olive Avenue and Northern Avenue provide access to the Loop 303 through a frontage road system. The surrounding area roadways will be improved as part of this development.

The following recommendations have been documented in this study:

Existing Conditions:

- ◆ The intersection of Reems Road and Northern Avenue does not operate acceptably in the existing condition (2004). Mitigation of this intersection by changing from two-way to four-way stop control resulted in levels of service (LOS) B and C for the AM and PM peak hours, respectively.
- ◆ The Northern Parkway alignment is currently being studied by the City's consultant and is in the final DCR stage. The exact configuration of the alignment has not yet been established. The "original" standard parkway typical section will include 210 feet of right of way with three general purpose lanes in each direction. Additional right-of-way options/requests have been depicted and are under review by the City and the developer. The true impacts of the parkway to the surrounding street network have been conservatively estimated with no reduction to projected east-west traffic flow along Olive Avenue and Northern Avenue.

Phase 1:

- ◆ Olive Avenue should be constructed as a principal arterial road containing 125 feet of right-of-way. Eighty-seven (87) feet of right-of-way will be provided

by the Woolf Crossing development, south of the section adjacent to the frontage of the property, due to the existing railroad right-of-way restricting expansion to the north side of the road. The ultimate half street construction has been requested by the City along the project frontage.

- ◆ Northern Avenue should be constructed as a minor arterial road which contains two lanes in each direction of travel separated by a two way left turn lane and provides 110 feet of right-of-way. Ultimate half-street construction has been requested by the City along the property frontage.
- ◆ Sarival Avenue should be constructed as a major arterial road within 130 feet of right-of-way. Sarival Avenue will provide three through lanes in each direction of travel separated by a two-way left turn lane in its ultimate condition. The City has requested the half street construction of Sarival Avenue along the property frontage.
- ◆ Reems Road is classified as a minor arterial in the MCDOT Street Atlas with two lanes in each direction of travel separated by a two-way left turn lane with 110 feet of right-of-way. The City of Glendale has requested that Reems Road be constructed as a major arterial north of the northern parkway. Major arterial construction will include three lanes in each direction of travel separated by a two-way left turn lane within 130 feet of right-of-way. Half street construction of Reems Road along the property frontage has been requested by the City at which time the property adjacent to Reems Road develops.
- ◆ The northern collector road from Access A to Access D should be constructed as a minor collector road with opportunities for bike lanes and offset sidewalks to provide pedestrian safety for school related trips. The full street width should be constructed with phase 1 providing 70 feet of right-of-way.
- ◆ The southern collector road from Access E to Access H should be constructed as a minor collector road with 70 feet of right-of-way. The full street width should be provided with phase 1 of the development south of the Northern Parkway alignment.
- ◆ All major access points within the development, A, D, E and H should provide a separate left turn lane for egress.
- ◆ Olive Avenue will operate acceptably in the 2007 opening year with one lane in each direction of travel and the addition of left turn lanes at all site access points. Additional lanes may be striped in this location with the half street pavement improvements but are not required for the roadway operations.
- ◆ Northern Avenue will operate acceptably in the 2007 opening year with one lane in each direction of travel and the addition of left turn lanes at all site

access points. Additional lanes may be striped in this location with the half street pavement improvements but are not required for the roadway operations.

- ◆ Sarival Avenue will operate acceptably in the 2007 opening year with one lane in each direction of travel and the addition of left turn lanes at all site access points. Additional lanes may be striped in this location with the half street pavement improvements but are not required for the roadway operations.
- ◆ Reems Road will operate acceptably in the 2007 opening year with one lane in each direction of travel and the addition of left turn lanes at all site access points.
- ◆ Right turn deceleration lanes are required at all major access points to the development. Minimum deceleration lane queue storage of 75 feet has been calculated at access points A, D, E and H. New deceleration lanes should provide 12 feet of width and taper to match the existing curb line at a minimum of 15:1.
- ◆ The intersection of Northern Avenue and Reems Road operates unacceptably in the 2007 opening year without mitigation. Changing the stop control from a four-way to a traffic signal with the addition of left turn lanes in all directions provides the capacity to achieve an acceptable LOS.
- ◆ According to the MCDOT Roadway Design Guidelines, separate left turn lanes should be constructed for all movements under stopped or signalized intersection control. Left turn lanes should be constructed in all directions at the intersections of Sarival Avenue and Olive Avenue and Sarival Avenue and Northern Avenue with the Phase 1 construction and improvements. Left turn lanes will be required for ingress to all driveways accessing the Woolf Crossing. Queue lengths for these movements have been included in Table 9 for the 2007 horizon year.

Buildout:

- ◆ Northern Avenue, Sarival Avenue and Reems Road will operate acceptably in the 2027 future year with two lanes in each direction of travel.
- ◆ Olive Avenue will operate acceptably in the 2027 future year with three lanes in the westbound direction and two lanes in the eastbound direction.
- ◆ The Loop 303 will require three general purpose lanes in each direction of travel by the 2027 future year. Both intersections of Olive Avenue and Northern Avenue with the 303 will require additional turn lanes to mitigate

levels of service in the future. Recommendations for these movements have been depicted in Figure 13.

- ◆ The intersections of Sarival Avenue/Olive Avenue, Sarival Avenue/Northern Avenue and Reems Road/Olive Avenue will require signalization by the 2027 future year to mitigate lower levels of service. It is estimated that the intersections of Olive Avenue/Sarival Avenue and Northern Avenue/Sarival Avenue will require signalization by 2011. Signalization of the Olive Avenue/Reems Road intersection is anticipated by 2016.
- ◆ The Northern Parkway to Loop 303 System Interchange could provide several complications to north-south traffic along adjacent arterial streets due to the location of ramps and frontage roads. A through connection along Sarival Avenue is recommended as well as a full interchange to service the adjacent commercial property.
- ◆ According to the MCDOT Roadway Design Guidelines, separate left turn lanes should be constructed for all movements under stopped or signalized intersection control. Separate left turn lanes should be constructed at the intersections of Reems Road and Olive Avenue and Reems Road and Northern Avenue with the buildout of the remaining parcels. Left turn lanes will be required for ingress to all driveways accessing the Woolf Crossing. Queue lengths for these movements have been included in Table 10 for the 2027 horizon year.
- ◆ Access points for the future development are conceptual only for the purposes of estimating the impacts of full development on the surrounding street network. Additional studies should be prepared with each phase of development to determine the timing of recommended improvements and true impacts at proposed driveway locations.

APPENDIX E

LEGAL DESCRIPTIONS

LEGAL DESCRIPTION

THAT PORTION OF SECTION 31, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8" REBAR ACCEPTED AS THE NORTHWEST CORNER OF SAID SECTION 31 FROM WHICH A MARICOPA COUNTY HIGHWAY DEPARTMENT BRASS CAP IN HAND HOLE ACCEPTED AS THE NORTHEAST CORNER THEREOF BEARS SOUTH 89 DEGREES 02 MINUTES 25 SECONDS EAST A DISTANCE OF 4876.07 FEET;

THENCE ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 31, SOUTH 89 DEGREES 02 MINUTES 25 SECONDS EAST A DISTANCE OF 2240.36 FEET TO AN ALUMINUM CAP STAMPED WITH RLS #19854 ACCEPTED AS THE NORTH QUARTER CORNER THEREOF;

THENCE CONTINUING ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 31, SOUTH 89 DEGREES 02 MINUTES 25 SECONDS EAST A DISTANCE OF 1156.16 FEET;

THENCE LEAVING THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 31 WHICH BEARS SOUTH 00 DEGREES 00 MINUTES 28 SECONDS EAST A DISTANCE OF 2618.40 FEET;

THENCE NORTH 89 DEGREES 27 MINUTES 50 SECONDS WEST A DISTANCE OF 34.02 TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 5868.89 FEET;

THENCE SOUTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 21 DEGREES 11 MINUTES 04 SECONDS, AN ARC LENGTH OF 2169.95 FEET;

THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST A DISTANCE OF 606.82 FEET TO A POINT ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 31;

THENCE ALONG THE SOUTH LINE OF SAID SOUTHWEST QUARTER, NORTH 89 DEGREES 16 MINUTES 38 SECONDS WEST A DISTANCE OF 401.47 FEET TO AN ALUMINUM CAP STAMPED WITH RLS #19854 ACCEPTED AS THE SOUTH QUARTER CORNER OF SAID SECTION 31;

THENCE CONTINUING ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 31, NORTH 89 DEGREES 16 MINUTES 38 SECONDS WEST A DISTANCE OF 2265.44 FEET TO A MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION ALUMINUM CAP IN HAND HOLE STAMPED #29891 ACCEPTED AS THE SOUTHWEST CORNER OF SAID SECTION 31;

THENCE ALONG THE WEST LINE OF SAID SOUTHWEST QUARTER, NORTH 00 DEGREES 15 MINUTES 45 SECONDS EAST A DISTANCE OF 421.05 FEET TO THE BEGINNING OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 935.00 FEET;

THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 56 DEGREES 36 MINUTES 48 SECONDS, AN ARC LENGTH OF 923.86 FEET;

THENCE NORTH 56 DEGREES 52 MINUTES 33 SECONDS EAST A DISTANCE OF 619.00 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 935.00 FEET;

THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 56 DEGREES 37 MINUTES 46 SECONDS, AN ARC LENGTH OF 924.13 FEET;

THENCE NORTH 00 DEGREES 15 MINUTES 18 SECONDS EAST A DISTANCE OF 625.94 FEET TO THE BEGINNING OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 935.00 FEET;

THENCE NORTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 60 DEGREES 03 MINUTES 06 SECONDS, AN ARC LENGTH OF 979.97 FEET;

THENCE NORTH 59 DEGREES 47 MINUTES 17 SECONDS WEST A DISTANCE OF 409.06 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1068.00 FEET;

THENCE NORTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 60 DEGREES 03 MINUTES 26 SECONDS, AN ARC LENGTH OF 1119.47 FEET;

THENCE NORTH 00 DEGREES 16 MINUTES 09 SECONDS EAST A DISTANCE OF 392.92 FEET TO THE POINT OF BEGINNING.



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